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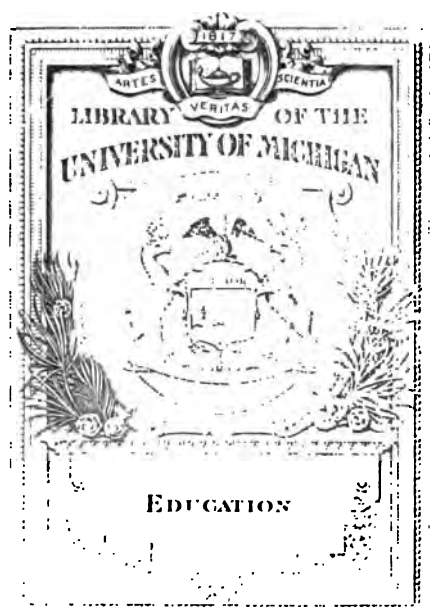
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[Introductory Letter to Vol. 6 of the Series.]

To Sir G. W. KEKEWICH, K.C.B.,
Secretary of the Board of Education.

SIR,

I HAVE the honour to present to you the accompanying volume of Special Reports, descriptive of the work of Preparatory Schools for Boys and of the place which they occupy in secondary education in England.

The schools in question are an interesting and important part of the system of national education. In their history, organisation, educational aims and courses of study, they exhibit many characteristic features not found in the corresponding parts of secondary education in other countries. They provide for a large majority of the boys, intended for the Public Schools, the first three or four years of secondary education. During the last two decades they have made notable advances in general efficiency, and it is doubtful whether any other part of our national education has been distinguished by a more rapid and comprehensive improvement. In many respects they may be said to be the best schools of their kind in the world.

It is singular that no attempt has previously been made to describe in a systematic way the varied work of these schools, the conditions under which that work is carried on, and the relations which they bear to the Public Schools for which they prepare. The present volume has been written in order to fill this gap in our educational literature, and to provide for the students of English education materials which will enable them to judge of the aims, methods and special difficulties of this type of secondary schools.

The table of contents, following this letter, will best show the range of subjects with which the volume deals. The aim has been to give an account of the various sides of the work of English Preparatory Schools, in a form which will (it is hoped) be not unattractive to the general reader, while at the same time in sufficient detail to meet the special needs of the professed student of educational systems. I believe that the volume may be taken as giving a just idea of the present position of these schools in national education, of the intellectual standard reached by them in their work, and of the varied influences which they bring to bear on the character, the activities and the physical well-being of the boys committed to their care. And, as the

matter is not elsewhere discussed in the volume, this will perhaps be the most convenient point at which to state that religious instruction forms part of the curriculum in all English Preparatory Schools. While there is a general agreement, among those interested in the education of boys of preparatory school age, that the moral tone and religious atmosphere of the school, and the example of the masters and of the elder boys, leave a deeper mark on conduct than, taken by itself, verbal instruction can ever make, there is none the less a strong conviction among almost all concerned that religious teaching of a systematic kind, given in a form suitable to the age of the pupils, is a necessary part of all true education. As one outcome of the freedom which, in so many respects, is characteristic of English educational development, the religious teaching in preparatory schools has adjusted itself, naturally and without friction, to the varied shades of association and observance which are typical of the religious life of this country. The fact that the schools in question are mostly boarding schools has obviated many of the difficulties, practical and theoretical, which might have been encountered under other conditions. But, as things are, variety of influence has not given rise to conflict or to misunderstanding, nor has it in any way impaired the feeling of unity among those who, from somewhat different standpoints, are co-operating in this branch of national education.

It will be obvious to all readers of this volume that the welfare and outlook of the preparatory schools are closely and necessarily bound up with the traditions and requirements of the public schools. In regard to the course of instruction which still holds a dominant place in the public school curriculum, there is at the present time considerable difference of opinion. The subject is admittedly a complex one, and not easily determined either by theoretical considerations or by appeals to individual experience. Much is to be gained from a temperate consideration of the arguments advanced on both sides. Some persons incline to favour, others to distrust, attempts to alter the present prevailing curriculum. High authorities seem to differ on the question whether the ordinary classical course (taken at its best and with the present admixture of other subjects) could be made more "educational" without some loss of salutary discipline and of its power to correct inaccuracies in thought and expression. Hardly less divided again is expert opinion as to the degree in which a course of study, for boys of the age in question, can be made to combine "educational" and directly "practical" advantage. These differences of opinion are, as is natural under the circumstances of the case, reflected in the present volume, the contributors to which will be found to approach questions of curriculum from many points of view. But, however divergent in their opinions on other matters, they are all at one in their hearty appreciation of the service which the public schools have rendered, and are rendering, to national education.

Thanks are due to the ladies and gentlemen who, often at great inconvenience and under pressure of much other work, have been so good as to contribute articles on those aspects of the question on which their long experience specially entitles them to speak. Acknowledgment should also here be made of the kindness of large numbers of correspondents, who found time to furnish the materials on which the greater number of the following reports are based. The papers of questions which they answered for this purpose are printed in the Appendix.

I am, however, under special obligation to Mr. C. C. Cotterill, who, throughout the two years during which this volume has been in preparation, has acted as honorary co-editor of the reports and has shared with me from the first the labours of correspondence, arrangement and correction. To him is due the original conception of the work in its present extended form, and without the help of his great experience and of his personal influence among preparatory schoolmasters the completion of the plan would have been impossible.

I have the honour to be, Sir,

Your obedient servant,

MICHAEL E. SADLER,

Director of Special Inquiries and Reports.

December, 1900.

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[The asterisk signifies that the writer is Headmaster of a Preparatory School.]

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INTRODUCTION.

I.—HISTORICAL.

THE Preparatory Schools of England, if we understand by that term schools which prepare only for the Public Schools and the Royal Navy, and do not keep boys beyond the age of fourteen, are of quite recent origin. I have been able to trace the existence of such a school back to the year in which her present Gracious Majesty ascended the throne, but to no earlier date, though I have made a careful search. In the year 1837 there was started in the Isle of Wight a Preparatory School of this strict type. Further investigation may possibly point to a somewhat earlier date for the genesis of the Preparatory School, and to some other school than this as the first example. But it can, I think, only be a question of a few years, and for all practical purposes we shall be safe in taking this particular school as the first of its type. It happens that the circumstances connected with its foundation are of special interest, both educational and national. They are eminently typical of the characteristics of our race, and deserve to be recorded.

The founder of Preparatory Schools, Lieutenant C. R. Malden, R.N., passed his youth and early manhood under very different conditions from those usually antecedent to the profession of a schoolmaster. He was an officer in His Majesty's Navy, and the life which he led right up to the time when he became a schoolmaster might have seemed a very inadequate, as it doubtless was a very unusual, preparation for such a profession. He was not only a sailor, but was almost uninterruptedly at sea. He was an accomplished mathematician, and, owing to this and to his skill as a draughtsman, he was for several years hydrographer to His Majesty. He was also devoted to the study of Latin and Greek, and even Hebrew. He had all the instincts of a scholar. I have been so fortunate as to see the evidences of his specially professional work while at sea, and also of the way in which he managed, in his hours of leisure, to follow a pursuit only second to him in interest to his own profession. I do not know whether most to admire the elaborate composition of his log-books, and the exquisite art of the water-colour illustrations of the places described in his various voyages, or the pertinacity with which he set himself, unaided, to become a classical scholar. In regard to this last, it is certain that no simple sense of duty, no mere ambition would have sufficed to carry a particularly busy sailor through what would have been to most men the drudgery necessary for the acquisition of the niceties of scholarship—such niceties for example as are evidenced by the ability to compose a copy of Latin verses of a more strictly correct type than was usual in the scholars of the early portion of the century. Such persistence belongs only to the devotee, and Lieutenant Malden may certainly be fairly described as a devotee to the classics.

In regard, therefore, to his specially scholastic attainments this accomplished sailor was curiously fitted for undertaking the

work of a schoolmaster. But he possessed other attainments of infinitely greater value than these intellectual ones for the equipment of a remarkable schoolmaster. He appears to have been a man of gentle nature, ahead of his time and calling at that period in his abhorrence of the harshness of discipline which frequently marred the splendid nobility and chivalry of nature characteristic of the British sailor in those and all other days. It was, I am told, largely owing to his sensitiveness on this subject, that Lieutenant Malden determined to give up a profession at which he had laboured so devotedly, and to adopt another which, though this was little recognised in those days, requires for its right performance the highest and most chivalrous qualities that human nature can command. Lieutenant Malden began his new work as a schoolmaster by taking pupils for the Royal Navy in the Isle of Wight. After a few years he purchased in 1837 the goodwill of a small private school of the type common in those days, and from that time to this steadily becoming rarer—a school which took boys of all ages. This he immediately converted into a Preparatory School proper, and in the course of the next year he transferred it to Brighton. Within a few years he purchased a piece of land, and put up buildings specially adapted for a school. Of this school he continued to be Head Master until his death in 1855. I may be permitted to add that the school still flourishes in the charge of a member of the third generation of the family.

I have dwelt at some length upon the circumstances attending the genesis of the Preparatory School, partly because the history of the first beginning of any movement that is destined to become an important factor in national life must always have an interest of its own, partly because, as has already been stated, the circumstances attending this particular case seem to possess for Englishmen a unique interest, as being specially characteristic of the habits and qualities of our country.

A few words for the further elucidation of this may perhaps be allowed to me.

The first Preparatory School was started by a sailor—the member of a profession to which England owes, and by which she maintains, her position among the nations of the world—a profession the members of which have been endeared to Englishmen over a long roll of many illustrious centuries in the past, and were never more dear to them than at the present moment.

But the qualities that endear the sailor to us are not usually supposed to be such as would be looked for in a man destined to be a schoolmaster, particularly, perhaps, a Preparatory Schoolmaster. Be this as it may, it is an event of particular interest to an Englishman and one specially typical of our race that it was not an expert, not a trained educationist, but a sailor, with almost no previous educational experience, not even possessed of a University degree, who started what if not the first, was certainly among the first, of those schools which, during the space of a single reign in the history of England, have spread themselves

over the country, and are established as an integral portion of Secondary Education, without, I believe, anything corresponding to them in any other nation.

There is one other feature in the circumstances of this particular school of great interest to the student of Education, which I shall now simply bring to the notice of the reader, returning to it again in another connection. Lieutenant Malden numbered among his early supporters a friend of Dr. Arnold's, at that time Headmaster of Rugby. Through the kindness of Lieutenant Malden's son and successor I have seen and examined a complete list of the boys who passed through the school from its foundation in 1837 to the year of its jubilee in 1887. In the early years of the school the majority of the boys went straight from it to Rugby.

Such is the history of what appears to be the first Preparatory School, using that term in the strict sense in which it is understood nowadays. It remains to account for the demand for such schools and the consequent supply, the result being the birth of the modern Preparatory School.

The rise and subsequent rapid development of Preparatory Schools can be explained only by a reference to the condition of Public Schools which prevailed during the period of that rise and development. For it cannot be too carefully borne in mind that the connection between Preparatory and Public Schools has been, is, and always must be of the very closest description. The former are, in fact, the junior departments of the Public School.

When Dr. Arnold was appointed to the headmastership of Rugby School, in the year 1828, and for some time previous to that date, there is no doubt that dissatisfaction with the condition, and especially the moral condition, of the Public Schools in England was widespread and profound. The literature of the period abounds in such references. It was the supreme merit of Dr. Arnold, one of the many evidences of the reality and sagacious optimism of his character, that he recognised the truth that lay at the bottom of these damaging external criticisms, and yet entirely refused to acquiesce in the hopelessness of the situation. In a notable utterance, which should be carefully studied by everyone desirous of comprehending the condition of things prevalent among Public Schools before Arnold's time and Arnold's method of dealing with it, he lays the whole subject before the masters and boys assembled in Rugby Chapel, very shortly after his appointment to the headmastership. He quotes the words of Mr. John Bowdler (whom he terms a "sensible and excellent man") when commenting upon the condition of Public Schools, and says that he cannot find words that express better the sense of serious men:—"Public Schools are the very seats and nurseries of vice. It may be unavoidable, or it may not, but the fact is indisputable."

Among Arnold's comments upon this indictment is the following:—"I am afraid the fact is, indeed, indisputable, "Public Schools *are* the very seats and nurseries of vice. But

"he goes on to say, 'It may be unavoidable, or it may not'; and "these words seem to me as though they ought to fill us with the "deepest shame of all. For what a notion does it give, that we "should have been so long and so constantly bad, that it may be "doubted whether our badness be not unavoidable, whether we "are not evil hopelessly, incurably. . . . But the doubt "whether our viciousness be or be not unavoidable is something "too horrible to be listened to."*

The main cause of this state of things lies, according to Arnold, in the barrier existing between masters and boys, and in the distrust felt by the latter towards the former. And the main remedy lay in altering this evil condition. If, then, there was a general feeling among the homes of England that such a description as this of the moral state of Public Schools was even approximately accurate, and if anything approaching to hopeless acquiescence in the incurability of the disease was also generally prevalent—and there seems little doubt that both these suppositions are matters of fact—then it will be readily understood that the supply of boys for the Public Schools of England was at that time a very meagre one. The immediate cause of the restored and increased confidence of the parents of England in the Public Schools, and of the consequent large and suddenly increasing flow of their sons to these schools, and of the demand for more Public Schools, is not far to seek. The immediate cause was Arnold. Following naturally upon this, and together with other circumstances—to be alluded to later on—which were closely bound up with Arnold's treatment of the problem presented to him in the then condition of Public Schools, came the demand for Preparatory Schools—Preparatory Schools of the stricter modern type.

The frank recognition of the existing evil; the refusal to acquiesce in its hopelessness; the clear-sighted perception of the main cause of the evil; the bold triumphant genius displayed in the application of the remedy—here lies in a nutshell the explanation of the rise of the Preparatory Schools of England. It was Arnold—Arnold almost alone—that brought them to birth.

We are all aware of the orthodox and common-place view that a genius is but the creature of his age, and can do little, if anything, more than interpret and express it; and in a limited sense this is, of course, true. But I profoundly disbelieve in the almost limitless control over events that it is fashionable to ascribe to the spirit of the age, and the quite unimportant and almost mechanical part that is assigned to the efforts of the farseeing, resolute, immovable genius that is the inspiration of the movement. In the case under consideration other agencies, more or less occult, were at work, directed towards the same ends as those pursued by Arnold, facilitating and furthering his designs. But I have a deep conviction that Public Schools might have remained for many years—for a period of quite indefinite duration—in the bad condition that they were in during the early part of the

* Sermons, New Edition, 1878. Vol. II. "Public Schools," pp. 80, 81.

century, had not Arnold appeared, seen what he saw, and done what he did.

For, again, what did he see? He saw a condition of things the most hopeless while it lasts, of all conditions that can exist, or be imagined to exist, among the members of any such society. He saw mutual distrust prevailing between the masters and boys of a Public School—a distrust different, of course, as applied to each, and arising from different causes, but yet distrust. He saw, with the eye of genius, that so long as this prevailed, and precisely in proportion to its prevalence, so long would there prevail an utterly unsound condition at that school. And what did he do? That which only a great man could have done, but which he was sure to do. He completely, avowedly, privately, publicly, trusted the boys himself, and thus, human nature (let us be thankful) being what it is, he rendered it certain that all but the poorest, shallowest, meanest natures—and few indeed are such—would answer to that trust. And in this conviction he was right—he was proved right by the result.

It would indeed be an assertion of mere ignorance to say that Arnold was the first schoolmaster to repose complete confidence in his boys. I have often thought that, if the materials were at hand and the right man for dealing with them, no more winning book could be written than that which contained a faithful record of the lives of many a schoolmaster in the past centuries who loved and trusted his boys with the love and trust of a father. For lack whether of material or of biographer, many a devoted, sweet, lovable personality is lost to the future, except in so far as it lives again, its sole ambition for fame, in the lives of its scholars and friends. The instance of Goddard, Arnold's own headmaster at Winchester, is especially appropriate here.

Without doubt the example of Goddard, as a man who loved and trusted his boys, had sunk into Arnold's mind, and was fruitful. The special point here is not so much what many of Arnold's predecessors *were*, as what they *did*. It was the combination of qualities in Arnold that made him able to effect what he effected—that made him one of the greatest educational reformers, in so far as direct influence upon character goes, that has ever lived. He was not only a great schoolmaster, devoting himself with truly professional zeal to all the details of his profession, as then practised, but he was a great man, and he moved naturally and by choice among great thoughts and ideas of the most varied and diverse descriptions. But amid all these interests he never lost sight of the school: "The more active my own mind is," he says, "the more it works upon great moral and political points the better for the school," and these words show us wherein he differs from his predecessors. Many of them had loved and trusted their boys equally with himself, but to none of them was there present the same wide outlook upon the whole situation, and the same passionate desire to reform the *whole*.

Many headmasters before Arnold had, like Arnold, revolutionised the lives and characters of their own pupils. It was

reserved to Arnold to revolutionise education itself. If further explanation of this, beyond that which has been already offered, seems requisite, there is but one remark to be made. It was in the *greatness* of Arnold that the difference lay.

I once asked Dean Stanley, Dr. Arnold's pupil and biographer, as to the place to be assigned to Arnold in the roll of remarkable men. He replied:—"Comparing him with the great men I have known personally, and through their lives, writings, and deeds, I consider Dr. Arnold a historical star of the first magnitude."

It will not, I am sure, be felt that the above is offered as anything approaching a complete account of the means adopted by Arnold to reform the Public Schools of England. What these were in detail can be appreciated only by a careful reader, not merely of his life, but of his writings—his writings not on educational matters alone. But I am confident that the root of the matter lay in what is stated above. Distrust was the main cause of the disease, and distrust was exorcised by trust.

Less than this could hardly have been advanced consistently with any serious attempt to substantiate the statement that the author of the Preparatory Schools was Arnold. To Arnold, to Arnold almost alone, was due the substitution of confidence in the Public Schools for the deep distrust and, in some quarters, dread and abhorrence of them felt by many of the more thoughtful and serious parents of that period. Hence the increase of their popularity and an increased demand for them, in consequence of which arose the demand for schools preparatory for them.

But the subject cannot be dismissed here. Something yet remains unexplained. Granted the simple historical fact of the greatly increased demand for Public School education during the closing period of Arnold's headmastership—a demand, as I firmly believe, almost entirely due to Arnold's work and influence—there yet remains the question, why should not this demand have been satisfied by an increased supply of Public Schools? Why should not parents have been content, as was customary before, to send their sons to the Public Schools direct from home at a very early age? In answering this question, it will be seen that the main cause of the change of opinion, which led parents to put off the period of sending their boys to a Public School to a somewhat later age, is to be traced again largely to the influence of Arnold.

In the first place, Arnold actually discouraged boys entering Rugby before they were twelve years old, thus rendering it necessary that many boys who would otherwise have come to Rugby straight from their homes should go to some other school beforehand. "I have always advised people not to send their boys as boarders under twelve, but have never applied the same advice to foundationers living under their parents' roof."*

* Stanley's *Life of Dr. Arnold*, Vol. II., p. 133, 9th edition, 1868. (Letter to Mr. Justice Coleridge.)

And there can be no doubt what kind of school Arnold would have preferred this to be. He would have preferred it to be a school which took only young boys—a Preparatory School in the strict sense of the term. This seems to be clear from two considerations.

1. We find Arnold actually supporting a school of this type—Lieutenant Malden's.

2. Undoubtedly Arnold's keenest interest in the education of boys lay in the formation of their moral character. He has even been charged with sacrificing the intellectual side in his zeal to promote the moral. Whether this be so or not, and I should be prepared to prove the negative were this the place for such a discussion, there is no doubt about the fact of the intensity of his interest in what is sometimes designated the moral problem. With what seemed to be in his case a really unerring sagacity, he recognised that, in dealing with this moral problem, a different kind of treatment was necessary for, speaking roughly, the boy over and the boy under thirteen or fourteen. Further, it is quite impossible that he should have failed to perceive that, in the application of his new law of liberty and confidence to the boys of a Public School, some modifications must necessarily be made in the case of boys who came to him almost straight from the nursery. Anyone more than quite superficially acquainted with Arnold's methods of approaching boys is aware that it was almost entirely to the older ones that he appealed, and that the presence of quite little boys, little children, at Rugby must have been felt by him to be completely out of place. It is quite evident—and to none would it be more evident than to Arnold—that, if the 300 boys who were at Rugby were to get the maximum benefit from Arnold and Arnold's noble methods, there should be excluded from the school boys of tender age. Hence it does not surprise us to find, as we have found, that Arnold was a supporter of a Preparatory School of the strict type, and dissuaded parents from sending their boys to Rugby at the early age which was customary in those days.

Such, then, would seem to be some of the reasons naturally presenting themselves as accountable for the origin of Preparatory Schools. A few words must be added explanatory of the extraordinary rapidity of their growth within the last quarter of a century—a growth compared with which, in its rapidity and extent, there are few things equally striking in the history of English secondary education. It is not, as might possibly seem to be the case, to be accounted for by simply pointing to the contemporaneous growth of Public Schools. The growth of the latter during the same period, though great, has been completely out-distanced by that of the Preparatory Schools. I believe the following to be among the main reasons.

The general institution of scholarship examinations, and, to some extent, the entrance examinations at the Public Schools undoubtedly worked towards this end. To get one of the specially

coveted scholarships it is almost necessary that a boy should be educated at a Preparatory School where such things are understood. And from such a school an ordinary boy is far more likely to take a good place at a Public School than if he were educated at home or privately.

Another and possibly the chief reason for the vast increase in the Preparatory Schools during about the last twenty-five years is to be found in the larger numbers of boys accommodated at most of the great Public Schools. It has in these later years become quite plain to almost all parents and schoolmasters, including, of course, Public School Masters, that to send a very young boy, as was customary years ago, to a Public School containing about 600 boys is a very unwise proceeding. Probably most Public School Masters would to-day advise that a boy should not be sent to a Public School before the age of thirteen or fourteen.

It is not proposed here to do more than allude in passing to this fact of the enormous increase in the numbers of the boys at most of the great Public Schools. It is a fact which must never be ignored by anyone who wishes to form a correct opinion upon either Public or Preparatory School education, and it is a fact which has received far less attention than it deserves. It has profoundly altered and complicated many of the problems of Public School education, and it has, accordingly, extended its effects also to Preparatory Schools. At present attention is called to it only in so far as it has to do with this particular subject of the increased demand for Preparatory School education.

Other influences have, of course, been at work tending towards the same end. But those already stated will, I believe, be found to be the really important and determining ones.

It remains to mention one other reason which has been often brought to my notice as accounting largely for the vast exodus of boys from their homes to Preparatory Schools. It is sometimes said that the cause lies largely in the unwillingness of parents to undertake the trouble and responsibility involved in having their boys educated at home, or even at day schools, and the main reasons given for such unwillingness are the absorbing calls of business or pleasure or both. It cannot be doubted that there are parents to whom such criticisms are applicable. But my own belief is that one of the main causes of this exodus during the last twenty or thirty years is the intense desire of parents to do the best for their children. Their estimate of what is the best for them may, it is needless to say, not always be correct. This may affect the children, but it does not affect the question. I do not believe there has ever been a time in which so much pains was taken by parents, so much thoughtful, anxious, patient consideration given, to enable them to carry out what *seems to them* to be best for their children. Their opinion as to what *is* best for their children varies to an untold degree. The variety of such opinions is so great, and the motives determining the final selection of a school are so

interesting, sometimes so diverting, sometimes so disconcerting, that a small volume might well be written on the subject. But the fact of this keenness of interest in their children's future is undoubted, and it is full of hope and encouragement. It is already producing far-reaching effects upon Public and Preparatory School education, and is destined to produce still greater ones. Multitudes of parents who, if they consulted merely their own selfish parental affections, would elect to keep their children at home up to the age when they go to a Public School are unable to do this, consistently with what they believe to be in their children's interests. Health, means for sufficient competition in both physical and intellectual pursuits, due preparation—physical, mental, moral—for the plunge into the bewildering numbers of the great Public Schools, the continuous watchfulness of one careful and skilful man during perhaps the most formative period of a boy's life—these are only some of the considerations which, according to my own observation and knowledge, do at the present time influence parents in sending their boys to Preparatory Schools, and in selecting particular schools. The field for such selection is certainly wide enough to satisfy every conceivable desire on the part of anxious parents, and to meet every conceivable idiosyncrasy on the part of their boys.

II.—THE NUMBERS AND ORGANISATION OF PREPARATORY SCHOOLS IN ENGLAND.

The aims of Preparatory Schools, the work they are doing and are destined to do, the manner in which they are equipped for doing it, and the results of all this as represented by the boys as they leave them, and the men that these boys become—the product of the Preparatory Schools—all this forms the subject matter of detailed and special treatment in the various papers that follow. But for the better appreciation of such detailed treatment some general information on certain points and aspects of the subject may perhaps be most usefully conveyed by some remarks of an introductory character.

And first with regard to the numbers of the Preparatory Schools. It must be at once understood that any calculation on the subject must be taken as only approximately accurate, for the materials for a precise estimate do not at present exist. As the result of a careful investigation conducted on behalf of the Association of the Headmasters of Preparatory Schools about three years ago, and allowing for developments in the interval, it is calculated that there exist in Great Britain at the present time about four hundred Preparatory Schools, of the strict type as defined by the Association. As forming a necessary preliminary condition for membership of the Association the definition, with the condition of membership, is as follows:—“Any School which, according to its prospectus, consists only of boys under fifteen, and prepares them for the schools represented in the Headmasters of Public Schools' Conference, or

for the Royal Navy, shall, subject to the approval of the Committee, be entitled to representation at the Conference of the Association."

The present position and the future aspirations of the Preparatory Schools would be quite inadequately understood without some account of the Association to which allusion has just been made.

A meeting of Headmasters of Preparatory Schools was held in London on March 30, 1892, to discuss Preparatory School cricket. The success of the meeting suggested the idea that united conference and action on the part of Preparatory School Masters was very desirable. Accordingly a meeting was held in London on December 23, 1892, at which fifty Headmasters were present. It was resolved unanimously—

1. That an Association of Headmasters of Preparatory Schools be now formed.
2. That the Association be represented by a committee of fifteen.
3. That all questions affecting the organisation of the next year's conference be left in the hands of the committee.

From that time the Association has held an annual conference in London at the end of the Winter Term. At the present time the members of the Association number about 280, among whom are the Headmasters of almost all the leading schools. The constitution and aims of the Association cannot be better expressed than in the following quotation from its prospectus:—

The Association was founded in the year 1892.

Its objects have been defined as follows:—

- (1.) To draw more closely together the Head Masters of Preparatory Schools, and organise their opinion.
- (2.) To advance the interests of education as affecting those schools.
- (3.) To provide a recognised channel of communication with the Public Schools and with other educational bodies.

An Annual Conference of the Association is held at the beginning of the Christmas holidays.

The affairs of the Association are conducted by an Executive Committee of fifteen members, five of whom retire in rotation every year and are not, for one year, eligible for re-election. The Hon. Secretary and the Hon. Editor of the *Preparatory Schools' Review*, both of whom are appointed by the Committee, are additional *ex-officio* members of that body.

The duties of the Executive Committee are:—

- (1.) To make arrangements for Conferences of the Association, and to select subjects for discussion.
- (2.) From time to time to invite, formulate, and circulate the opinions of members on educational matters.
- (3.) To receive suggestions from members and to give advice and information if appealed to.

The organ of the Association is the *Preparatory Schools' Review*, the first number of which appeared in 1895. It is under the management of an hon. editor responsible to the Committee.

Work of great value has already been done, and much remains to be done, by the Association. Its objects, as defined above, have been fulfilled already to a degree only known to those who have interested themselves in it from the beginning. It is, I know, easy to lay too much stress upon measures brought forward, discussed, and passed by such a body,

and I will not indulge in the enumeration of lists of these. But I will permit myself two remarks.

The intercourse that takes place between the members of the Committee of the Headmasters' Conference and of the Preparatory Schools' Association has already been, and promises to be to an ever increasing degree, productive of most beneficial reforms in every sphere of secondary education—physical, moral, and mental. It has also, I believe, shown to both sides the immense value of a sympathetic appreciation of the aims, methods, and difficulties peculiar to each, and of the recognition of the great fact that the two classes of schools are so closely connected with each other as to be really one—the Preparatory Schools being in all respects (save that they are, with rare exceptions, not actually attached to particular Public Schools) simply junior departments of the latter.

This is much to have effected. But there is something to add to this. The Association found the Headmasters of Preparatory Schools isolated members of a profession, with no coherence whatever. It has introduced them to one another through various agencies too various and too subtle to enumerate. It has been, and will continue to be increasingly, the means of bringing together and forming friendships of the closest description among men who, though engaged in a common great work, would, but for it, have never known one another at all. It has created precisely that element, the lack of which was such a grievous defect among Preparatory School Masters—it has created solidarity, and a sense of a common public spirit. Before the existence of the Association each man was usually pursuing his own work in his own way, and devoting himself to his own school, ignorant of the work, aims, difficulties, mistakes, successes of others, giving nothing to them, receiving nothing from them. All this is now changed. The friendliness of the intercourse with one another, the desire on the part of all to communicate to others anything experience has shown to be of value to themselves, the new sense of comradeship and good fellowship—this has been, in the judgment of the present writer, the most precious gift that the Association has bestowed upon the Preparatory School Masters of England.

I have dwelt specially upon this side of the influence of the Association, partly because I believe it to be the most important and the most interesting feature, partly because it is a feature more likely perhaps to be passed over than others of a more superficially prominent kind. If I have insisted specially upon this, it is not that I do not fully recognise the value of the work of the Association in other, and more public, more noticeable directions.

There are, then, as has been stated above, probably about 400 Preparatory Schools of the strict type. There is much "honourable curiosity" to be satisfied regarding these schools. Where are they situated? What are the numbers at each? How are they equipped? What manner of men are the masters, heads and assistants, and how furnished for the work they have to do? How are they paid, the one and the other? And the buildings—

are these, in their main features and their details, adapted for their purpose? What are the subjects taught, and what are the methods of teaching? Are these modelled closely and mechanically upon those in use at the Public Schools? Or is there some disposition shown to adopt a more or less independent attitude?

Such are a few, taken indifferently, of the many questions that occur at once to anyone desirous of obtaining some accurate information regarding the Preparatory Schools of Great Britain. To supply such information is the object of the volume to which these general remarks are introductory.

III.—THE PLAN OF THE PRESENT VOLUME.

For the guidance and better information of the reader, it may be well to add some remarks concerning the credentials of the contributors to the volume and the general scheme upon which most of the papers have been framed; and lastly, concerning the materials upon which the writers have based their contributions.

The writers of the articles, with certain exceptions to be noticed presently, are Preparatory School Masters, engaged at the present time, or up to within the last year or two, in the practical work of their respective schools, and are mostly men of long experience in that work. They are dealing therefore with subjects of which they have intimate personal knowledge from *within*. This fact, taken in conjunction with the constructive scheme of the papers themselves, will, it is hoped, give to the contributions a special value and interest. Hearty thanks are due to those who have contributed these papers. For men with plenty of leisure at their command it would have been an onerous undertaking. But for men whose time is almost incessantly at the disposal of others, hour after hour, and whose work frequently involves much minute attention and much anxiety, to find time during the school term to perform an additional task of such a nature as this was a very difficult matter. Consequently in most cases a considerable portion of the summer and winter holidays has had to be devoted to the business. The time and labour necessary for an adequate treatment of most of the subjects has been great, and it has been bestowed with no stint. It is impossible to resist the remark that the ungrudging, unsparing devotion of so much disinterested labour, at such cost to themselves, upon work of a public character such as this augurs well for the future of the schools—the Preparatory Schools of Great Britain—over which such men preside. For these men represent their profession.

The scheme has, of course, been adopted merely as a general direction, to be used by each contributor in his own way, and with such modifications as befit his subject. The scheme is as follows:—In dealing with his subject each writer states, with as much completeness as is attainable, the actual condition of things prevalent in Preparatory Schools at the present time, adding, if possible, his own individual practice or predilections in the matter. Further, a statement is usually added, within the limits of a sober

optimism, of what seems to the writer to be a fairly practicable ideal, in advance of the present practice.

With regard to the materials which the writers have had at their command, in many cases the experience of the writer—the experience, it will be remembered, of an expert—would furnish him with an ample stock of materials upon which to found his deductions. But there are other subjects upon which it has seemed to be either necessary or highly desirable to go beyond the experience open to any individual schoolmaster howsoever experienced. In such cases a method has been pursued which has, it is hoped, secured a body of exhaustive information likely to prove of the highest interest and service to all who care to acquaint themselves with the subjects treated.

There has been issued to all the members of the Preparatory School Association, and to some other Preparatory School Masters not included in the Association, a series of statistical inquiries bearing upon some of the most important subjects that concern Preparatory Schools. These questions are in themselves so exhaustive and cover so much ground that it has been thought advisable to put them in an appendix, and we venture to recommend to the reader their careful perusal.

It will be seen that, in addition to the actual information asked for on matters of fact, a request has been added for expressions of opinion, both of a particular and a general nature. There has resulted a store of information of high educational value. This information has been dealt with by the writers of the papers dealing with the respective subjects, and has been embodied in their presentment of them.

Such, then, is the design of the papers, and such are the materials to be disposed of, in the case of those writers who are themselves engaged in the actual work with which they are dealing—who write from *within*. But in order to give the reader an account as complete and trustworthy as possible of the matter in hand, it has been thought advisable to call in the aid of other contributors also, who would deal with the matter from *without*. Failing this, there might seem to be a certain one-sidedness in the handling of the subject. It is however plain that, whilst this treatment from without is highly desirable, its desirability will be in exact proportion to the kind of information available to the writers. The men to whom alone anything approaching to precise information on the subject is possible are, of course, masters of the Public Schools. And of these, headmasters and house-masters will possess opportunities of gaining the most complete knowledge. All students of the subject, all who are desirous of seeing it from every side, are greatly indebted to the distinguished Public School Masters who have contributed papers on "The Preparatory School Product," and we beg to tender to them our thanks for the services they have thus rendered to the cause of education. Our thanks are also due to other outside contributors for their interesting and valuable papers upon some subjects closely connected with the work of Preparatory Schools.

C. C. COTTERILL.

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THE MASTERS OF A PREPARATORY SCHOOL.

THE character of a boy is so profoundly stamped during the years he passes at a Preparatory School, that what manner of men the masters are is to him a matter of the very gravest concern. In the following paper an attempt is made to furnish some trustworthy information upon this subject. The subject being one upon which it may be thought that trustworthy information is difficult to get, it seems only reasonable to state what sources of information the writer possesses. For more than thirty years I have had multitudes of acquaintances and many friends among Public and Preparatory School Masters. For the last two years it has been my special business to acquaint myself with the latter, and I have special facilities, of which I have taken full advantage, for doing so. Of the thirty-two years during which I was a schoolmaster, about twenty-two were passed at Public and ten at Preparatory Schools, and I had thus some opportunity for comparing, in my own professional experience, Public with Preparatory Schools and different types of each with one another. I may, perhaps, therefore be regarded as favourably placed for having materials at my command upon which to form a judgment, and it is, I suppose, less difficult for me, being no longer engaged in the actual work of a schoolmaster, to form an unbiassed judgment on such matters than if I were so engaged.

I.

I will speak first of the Headmasters. The Headmasters of Preparatory Schools are, with rare exceptions, graduates of Oxford or Cambridge. Most of them have been Public School boys, and many of them Public School Masters. They are, therefore, as a body, saturated with University and Public School spirit. Most of them have graduated in honours, and not a few in high honours. The ages at which they assume the duties of headmastership vary from what is almost the period of boyhood—immediately upon leaving the University, with not one day of experience—to the age of about fifty, with a quarter of a century's work and experience behind them. If the members of the Preparatory School Association may be taken as a fair test, the proportion of clergymen to laymen is as about one to six. The buildings which they occupy range from a single house in a row, with a couple of servants, to a princely mansion and surrounding estate, and a retinue of more than fifty servants. The boys for whom they are responsible vary from half-a-dozen to about a couple of hundred. If we turn for a moment to their financial position, their incomes must vary from something more than £15,000 to something less than £150 a year, and their profits from something that I cannot attempt to estimate, to nil. The whole subject of the finances of Preparatory Schools is treated else-

where in a separate paper, but as the supposed profits of Preparatory School Masters are sometimes the occasion of unfavourable comment, a few words will be permitted to me in this context. It is true that in the past several Preparatory School Masters have retired upon large fortunes, and I suppose a few, though certainly a steadily diminishing number, will do so in the future. Such very large profits as are implied by such savings seem perhaps to be open to criticism. But the criticism must be well informed and fair. Is it? If the financial risk were very slight or nil, then such profits might seem to be hardly defensible. But if the financial risk is enormous and failure means ruin, then the thing assumes a very different aspect. And this is the precise state of the case in the large majority of such examples. I only state what I know. This is not the place for a more elaborate statement, with particulars. The savings of the large majority of Preparatory School Masters are of a very modest nature, and are not unlikely to become less as time goes on. So far, indeed, as my knowledge extends, the Preparatory School Master—contrary, I imagine, to the opinion usually held on the subject—is as a rule, more inclined to spend money upon his school than to save it.

And this brings me naturally to a point of much interest. Can it be said that these men, responsible for the training during the most impressionable period of their lives of a large portion of the boys belonging to the upper and middle classes of society, have any special characteristics to differentiate them from other men or other schoolmasters? Are there, first, any special characteristics influencing them initially to undertake this kind of work? And, second, does the work itself tend to superinduce any special stamp?

Though these men represent characteristics diverse as are the various members of their country, still careful observation and reflection do, I am sure, render it possible to disengage certain characteristics of an undoubtedly distinctive kind.

First and foremost, they are, as a class, I am quite certain—though I am prepared to find the statement received with some scepticism—possessed in a large degree of the spirit of enterprise, even in some cases to the point of extreme rashness. One instance, related to me by one of the parties concerned, may serve to explain my contention. Two Assistant Masters of the Headmaster of a very important Preparatory School were leaving him to start a school of their own, and, on the eve of their departure, went to get from him a few last words of wisdom, the result of his own long experience, to guide them in their anxious undertaking. "The first piece of advice," he said, "and the last, that I have to give you is—start by getting deeply into debt." This spirit of financial enterprise gives, I am sure, in a curious and unexpected way, a kind of extra-professional, and therefore salutary fillip and piquancy to the life of many a Preparatory School Master, contributing a dash of the adventurer to a life too apt otherwise to develop the timid, cautious, not to say somewhat small side of a man's character.

If actual proof be needed of the presence of this element of enterprise in the character of the Headmasters of Preparatory Schools, it is ready to hand, in a very substantial form. The buildings, grounds, equipment of the Preparatory Schools of Great Britain are, for those who have some knowledge of them, and in proportion to the extent of that knowledge, a testimony of unaided individual enterprise quite unequalled, I believe, in the annals of education. The motive power that often, but by no means always, lies behind such enterprise is another question—I allude, of course, to the power of competition. Personally, I am not disposed, as will be explained elsewhere, to estimate its value highly. Be the causes what they may, it is a fact not to be denied that whatever other compounds go to make up the stuff of an average Preparatory School Headmaster's character, it may be assumed as certain that it almost invariably contains a large admixture of the ingredient of enterprise.

Further, the Headmasters of Preparatory Schools belong, as a body, to the class of what are known as successful men. They venture because they feel within themselves the capacity for success. They are not only enterprising, but their enterprises generally succeed. And yet the risk is often a serious one. The competition has for many years been very great. Still, extremely few go to the wall. They are persistent, resourceful, undismayed. It is by no means an uncommon experience among them to find that the locality in which they were once successful has, for some cause or other (sometimes a reasonable one, often enough quite unreasonable) lost its popularity, gone out of fashion. No weak, querulous upbraidings of fashion's silly fancies, or dejected acquiescence in the decrees of Fate. The tents must be pitched elsewhere—to fresh woods and pastures new. Nor can I recall an instance in which this spirited resourcefulness has failed. The Parents admire a dash of pluck and show their admiration of the adventurer in a tangible form. His boys follow him, and others follow in their wake.

Enterprising, persistent, resourceful—I may seem to be describing good business men. Certainly. As a body, with a fair sprinkling of exceptions, they would, I believe, justly answer to the description. And the description is an honourable one. This I believe to be the "solid base of temperament" that may be postulated as typical of most Headmasters of Preparatory Schools. It is hardly necessary to add that upon this base are constructed endless varieties of personal characteristics and idiosyncrasies—endless, among such a crowd of men, as are the types of humanity.

One vital question remains to be asked about them. Do they love their work and their boys? Is their heart in the business? Confining myself to those (and they are many) whom I know sufficiently well to speak of them with certainty, I reply that I cannot recall one instance where this is not so. Differing widely and deeply as they do in all sorts of directions—in aims, methods, theories, opinions, abilities, attainments, characters—they have one possession in common—devotion to their work and their boys.

Allusion was made above to the fact that Preparatory School

Masters are not specially careful financially, often the reverse. Their generosity is wonderful. It is probable that there is scarcely one of them who does not take some boys for little or no fees, and this indifferently in the case of schools that are quite full or otherwise. Also, they constantly help their old boys largely, and in all cases in such a way that it is usually impossible to hear of it excepting from the recipients themselves, and accordingly impossible to know the extent of such liberality.

There is something more to add. There are of course, among so many—it would be a miracle if there were not—some men of an inferior type, with inferior aims and methods. There are also some possessed of the very finest natures that it has been my privilege to know, simple, disinterested, unworldly, with some touches of what is really great. Some of these possess those fundamental elements of enterprise and potential successfulness, of which mention has been made above. Some of them possess nothing of the kind. They succeed, and, let us add with thankfulness, always will succeed, in spite of the absence of such sturdy and virile qualities, and in consequence of the presence in large and generous measure of qualities of a rarer kind, qualities that sometimes, in some careers, contribute to failure. Unbusinesslike, unpractical, cast in the mould of the artist, idealists, imaginative, sensitive, they succeed just because they are what they are—men filled with reality, naturalness, simplicity—because they have a touch of greatness, and because they are felt by those who come into contact with them to have it. These men, whether they possess those practical elements in their characters which go to make the great captains of industry, merchants, statesmen, soldiers, or the visionary elements out of which is formed the stuff that makes poets and philosophers, have all one common element in their composition—they have a touch of greatness. “They are wasted as Preparatory School Masters.” So I also have sometimes been inclined to believe. But the inclination is due to ignorance. Looking back, I can see quite clearly that, in so far as influence upon character goes, at the period of life when character is still readily, almost inevitably, moulded and stamped permanently by influence, there is absolutely no position in life where influence, for good or for evil, is so sure, so direct, immediate, powerful, as that of a Preparatory School Master. Such a statement may perhaps seem to some to be exaggerated. It is, of course, merely an opinion, and is incapable of proof. It is, at any rate, the result of much observation and a long experience.

A few words must suffice to answer the second question:—Does the life of a Preparatory School Headmaster tend to produce and foster any special type of character?

The life of a schoolmaster of any kind is commonly regarded as tending to produce a certain kind of pedagogic superiority and dogmatism, the result of having things very much your own way, and of dealing mainly with puerile, instead of virile, intelligences. And this general rule, again, might seem to be applicable

in a heightened degree to Headmasters, and very specially to Headmasters of Preparatory Schools, who deal with such very youthful material and are responsible only to themselves. The popular opinion regarding general pedagogic superiority has in it undoubtedly some truth, though the individual exceptions are numerous. And this general peculiarity may have a tendency to be accentuated in a Headmaster, as distinguished from an Assistant Master, particularly, perhaps, if the Headmaster is in a very prosperous condition. But much close observation of many Preparatory School Headmasters has convinced me that the large majority of them retain throughout their careers the human qualities implanted in them by nature in a very fresh and very delightful way. The explanation of this would lead us too far afield, and I must content myself with little more than a mere record of the opinion. The perpetual and close contact with the freshness of very early youth, and the love and sympathy for their boys characteristic of almost all Preparatory School Masters doubtless tend to keep them fresh and natural and to give them a dash of that boyishness so invaluable (I had almost said so necessary) to a schoolmaster. However acquired, it is, I rejoice to say, often there, a blessing both to themselves and their boys.

To sum up. The Preparatory School Headmasters are, of course, men of all kinds, good, bad, and indifferent; but, on the whole, they are a good body of men, and there are among them a certain proportion of the finest and most disinterested type of men that have ever worked usefully for their generation. They are such as they are both in consequence and in spite of the system to which, with so few exceptions that they may be neglected, they have to conform. This system is one of pure competition; the worst effects of which we are only too well acquainted with, as fostering some of the meanest and most selfish elements in human nature, and demoralising and debasing those who are subject to it. And the entrance of such a poisonous substance into a work of such fine and noble possibilities—we know only too well the possible results of this. *Corruptio optimi pessima.*

The best effects we also know—the encouraging of certain virile, if still selfish, qualities of our nature. It is to the credit of the Preparatory School Masters that it may, I believe, be stated with complete accuracy that, whilst it is impossible to maintain that they have been able in all cases to remain untouched by the evil influences of the system to which they are bound, it may yet be asserted confidently that the result of the fierce competition, the strain and the stress under which they live, has been shown almost entirely in its more wholesome products, which may at least lay claim to the distinction of virility. They are in their worse side (seen, as I have said, very rarely) pushing, commercial, selfish. In the better side of them (seen constantly, so constantly as to be a distinctive mark of the large majority of them) they are enterprising, energetic, unresting, successful; and they are all this in consequence of the system to which they are condemned.

But there is another side. They are something quite different, quite opposed to all this, in spite of the system to which they are bound. Wherever we recognise—and if our eyes are open we shall recognise them abundantly—evidences of disinterested and uncalculating generosity, evidences of the virtues that have a better chance to thrive in the air unpoisoned by the element so familiar to the breath of modern life—there do we see the Preparatory School Master what he is, *in spite of* the atmosphere which envelops him. He is, of course, as are the rest of us, largely the product of his environment, but he is also—and sometimes I think to a larger extent than are the average of humanity—the producer of that environment, under circumstances of special difficulty. If he had succumbed to it, he would have acquired characteristics the influence of which upon boys so young as are those subject to his influence, would be very great and very bad, and almost irremediable. By resisting it, he has rendered his influence upon his boys permanently and beneficently formative, and has thus contributed in large measure to the higher and nobler influences of his day and generation.

An endeavour has been made to set before the reader what manner of man the Preparatory School Headmaster is, together with his surroundings and the circumstances of his life.

There remains a question of serious importance both to him and to the country, for upon its answer depends largely the *quality* of the Preparatory School Master of the future. Will the calling of a Preparatory School Master be more or less attractive in the future than it has been in the past? Will there, that is, be attracted to it better material or less good? The subject seems to divide itself naturally into two parts.

What is the outlook for the Preparatory School Master in regard to (a) his financial position, (b) the general circumstances of his life?

(a) There seems little doubt that in the future there will be almost no large fortunes made. It may be taken for granted that with the rarest possible exceptions, the numerical limits of Preparatory Schools will be up to about sixty boys, and a very large proportion of schools will probably fall short of this number by ten or twenty. Again, everything points to yet greater demands upon the increased efficiency of the teaching staff, and, not to enter into details, the perfecting of the whole equipment of the school. That is, there will be a tendency towards an increase of expenditure. Nor does it seem likely that the fees will be increased; the tendency is more likely to be in the opposite direction. The profits, therefore, will tend to be smaller. On the other hand, there seem to be grounds for supposing that the risks of ups and downs will be less than they have been. A good Preparatory School, thoroughly well equipped, will take its position as an old-established place. It will have its history, traditions, and sources of supply. Its "Old Boys" will be numerous and loyal, and will be inclined, as

is already evident, to send their boys in turn to their old school. In a word, there will be continuity.

Such considerations, if sound, seem to justify the conclusion that the Preparatory School Headmaster of the future, though little likely to retire rich, will have the good fortune to experience less financial anxiety than his predecessors have experienced, will have a greater sense of security—an untold blessing—and may look forward with some degree of certainty to retiring upon a sufficiency, a modest competency.*

(b). The tenor of some of the above remarks already points to a favourable answer to the second question dealing with the circumstances, the life of the Preparatory School Headmaster of the future. Other considerations appear to point towards a like conclusion. The life of a Preparatory School Headmaster, who is fond of his work and his boys, is, when things go well with him, a singularly happy one—happy to a degree quite unintelligible to outsiders. But when things do not go well with him it is a life of terrible anxiety. When illness of a kind that may at any time become serious visits the school; when some grave moral evil has managed to assert itself among the community; when there is an apparently steady, and often totally inexplicable, falling off in the numbers, bringing with it that helpless sense of insecurity intelligible only to those who have experienced it; and when, as an aggravation of all the attendant anxiety, there is, as in the past there has often been, a sense of great isolation, a lack of almost any intercourse with his brethren of the same calling—under such conditions the burden of the headmaster's life is a very heavy one.

I am not so foolish as to expect that from the life of a schoolmaster—the father, brother, teacher, friend of so large a family—the elements of care and anxiety can ever be eliminated. His life must always be one of great anxiety. But are there, or are there not, reasonable grounds for holding that such anxiety will tend in the future to be actually diminished, and that, in so far as it exists, it will be more tolerable? To both of these queries I believe may be given an affirmative reply. I have already alluded to what seem to be good grounds for supposing that there will be given to the headmaster a greater sense of *security* in the future than it has usually fallen to his lot to experience in the past. And this goes deep, and certainly takes the sting out of almost all forms of anxiety to which he is liable. The enveloping atmosphere is changed. There is an indefinite increase of the power of resistance.

Looking also to the other main sources of serious anxiety to the schoolmaster, there would seem to be reasonable grounds for expecting some gradual alleviation of them in the future. As regards health, the preventive treatment is still in its infancy.

* It ought to be stated that the views expressed above regarding the financial future of Preparatory Schools are regarded by some Preparatory School Headmasters, in whose judgment I have much confidence, as too optimistic. The subject is again considered in the paper dealing with the question of Assistant Masters.

All enlargement upon this subject is, of course, impossible here. I must be content with a simple statement of belief that the application of this treatment is destined, year by year, to produce results favourable to robust health to a degree but little appreciated by most of us. Similar remarks, though in a modified degree, may be made regarding the actual treatment of disease. Greater knowledge and skill on the part of the doctor, combined with constantly improved arrangements at the schools themselves, and much more systematised methods—all this points in the same direction.

I venture to believe, though the subject is full of difficulties that there are also grounds for a modest optimism in our view of the future of the Preparatory School, as regards the infinitely important subject of moral health.

The full recognition on the part of doctors and schoolmasters and many parents of the intimate inter-relations of the physical, mental, and moral portions of a boy's nature; the actual carrying out of this principle in the arrangements of a boy's life at his Preparatory School; the tact and discretion displayed on the part of the schoolmaster in the personal treatment of the subject when it has to be so treated; the much more effectual co-operation of schoolmasters, parents, and doctors; the great assistance that schoolmasters are now rendering to one another by a frank intercommunication of ideas and experiences on this matter; and, above all, the undoubted fact that, great though the advances are in such directions, they are only the beginnings of what promise to be benefits of ever increasing reach—such considerations (and it must be understood that they might be greatly multiplied and elaborated) all point, I believe, in the direction of a mitigation of the anxiety of a schoolmaster on this score.

To sum up.—A comparison of the life and circumstances of a Preparatory School Headmaster in the past with those suggested by a sober forecast of the future seems to be in favour of the latter. The following seem to be the main grounds for such a conclusion:—An added sense of *security* in all departments: the substitution for a feeling of lonely isolation of one of comradeship, mutual help and sympathy on the part of the members of the same profession: a new sense of dignity as being concerned in the direction of what is at last recognised to be, not an aimless aggregate of private commercial establishments, but an integral and quite indispensable portion of the national system of Secondary Education.

II.

The subject of the Assistant Masters at Preparatory Schools is full of difficulties. The results of reading all that I can lay my hands upon that bears on the question, of conversing with many Preparatory School Masters, Head and Assistant, and of my own experience and reflection may be summed up as follows:—

The present position of Assistant Masters at Preparatory Schools, and their prospects, unless their circumstances can be greatly improved, are, in the large majority of cases, very bad.

If certain changes believed by the present writer to be practicable, and to be noticed later on, can be effected in their circumstances, there seems good reason to believe that, in the course of time, the prospects of the Assistant Master might be described in language very different from that which I have felt constrained to employ above. I shall first describe things as they are, so far as I have been able to ascertain them, and then proceed to make suggestions towards their improvement.

(i.) The large majority of Assistant Masters at an ordinary Preparatory School are graduates of Oxford or Cambridge, and most of them have taken honours. At the present time the supply is greatly in excess of the demand, with the usual result of such a state of things. The worst feature in the case—a feature so bad that, supposing it to be unalterable, the case would be hopeless—is that with the exception of a quite small minority, the prospects of the Assistant Master after a service of, say, ten or fifteen years get steadily worse and worse.

Let us take the case of any thoroughly well equipped, well managed, prosperous Preparatory School of to-day, a school whose Assistant Masters will provide us with a very favourable illustration of that class. It is a Boarding School in the country and accommodates about fifty boys. The resident teaching staff consists of the Headmaster and four Assistants. Of these Assistants the Senior Master, who has possibly been at the school fifteen or twenty years, may receive £200 a year with board and lodging, his junior colleague, fresh from the University, about £120, and the two others about £150.*

They are all of them well housed, well fed, and well treated by their Headmaster. Their lives may fairly be expected to be, and in many respects usually are, very happy ones. Their surroundings are generally delightful, and so are the boys. Their direct responsibilities are very light. When the term ends their school cares end with it, and their holidays are long and undisturbed by the anxieties which so often pursue the Headmaster during the same period. Surely, a happy life and fortunate lot. Yes, so long as they have *hope*, and that is just so long as they do not think of the future.

The young man fresh from the University usually finds everything delightful. The boys are jolly, especially out of school. He has plenty of outdoor exercise and rejoices in the games, as he did at College, and he finds his long holidays, with a sufficiency of money in his pocket, delightful also.

He has not begun to think of his prospects. One or two of his colleagues have, and their view of things is somewhat different. It is as follows. Almost their sole hope of being able to succeed, to the extent of having one day a modest home of their own, lies in their ability to become Headmasters of a Preparatory School, or in the adoption of some other calling. There

* If no board and lodging are allowed, £50 a year must be added to these figures. It may be objected that these figures are higher than the average salaries of Assistant Masters. I fear this is so. But certainly there are some schools where the salaries are as high as these, and I am purposely selecting such.

is no middle course. They feel—and the sentiment of their Headmaster is in entire accordance with theirs—that it would be the height of imprudence to think of marrying upon the prospects of an Assistant Master. What, then, are the prospects of starting a school of their own? A careful scrutiny of the facts leads to some such conclusion as the following:—Twenty years ago this was an easy matter. Even ten years ago it was not very difficult. To-day, though undoubtedly new schools are still being added, it is a very different matter. Competition has done its work—a mixed work. It would seem that throughout the length and breadth of the land almost no eligible spot remains unoccupied. Further, if such a spot be found, to establish a school which is likely in the face of to-day's competition to be securely attractive is a very costly business, and a very different thing from what it used to be. Further, and most disquieting of all, if inquiries are made to-day from the Headmasters of Preparatory Schools (schools whose equipment and management are supremely good) as to the supply of boys, the almost invariable answer will be that it would appear that the supply has now at last been exceeded by the demand, and that the old days of a pressure of boys beyond the capacity of schools have, excepting in some rare instances, ceased to be.

The risk, accordingly, of starting a new school is a great one, and the attempt, if it is to be made with any decent chance of success, will to-day involve a large and immediate expenditure of capital. The days of small beginnings are, speaking generally, over. What, then, remains? The chance of succeeding to some other established school.

Now, supposing a considerable portion of the Headmaster-ships of existing Preparatory Schools were to be filled from the ranks of the Assistant Masters, there would be thus provided homes for a large number of the Assistant Masters. Let us assume that, from one source and another, one-quarter of the most capable Assistant Masters may fairly look forward to having homes of their own. *What of the remaining three-quarters?* This is the problem to be faced—a problem the like of which exists, I believe, in no other calling in the kingdom. Is there any other calling of which it can be said that three-quarters of those who pursue it have to face a future in which it is impossible to marry and have a home? Surely the most elementary test, the minimum to be expected from the calling of your life, is that, with average ability and industry, you may look forward *some day* to the possession of an income upon which you can marry, and, with care and unambitious simplicity, support wife and children. But no one well acquainted with the present condition of things does not know that for the large majority of Assistant Masters at Preparatory Schools this is quite impossible. Further, in the case of this large majority, after the age of forty it becomes harder and harder, as things stand at present, to find work, and even to keep it when found.

(ii.) The position of things, as it reveals itself to a sober and

careful investigation of facts, is, as it stands now, next door to hopeless. The hope lies in the possibility of a complete alteration in this position. There are, I am thankful to say, grounds for believing that this hope may be largely realised.

The complete alteration of a state of things highly complicated and involving many diverse interests is very unlikely to be effected by the adoption of one sweeping reform, but by a combination of numerous measures, each one of which, if taken alone, would effect little or nothing. It will, I believe, be found that the case now under consideration lends itself, and lends itself alone, to this cumulative treatment. We must seize upon everything, however apparently insignificant, however apparently remote, and utilise it, if by any means we may remove what I cannot but describe as a blot upon the profession.

Let us assume that, even under the present unfortunate condition of affairs, one quarter of the Assistant Masters at Preparatory Schools may, by one means or another, look forward to having an income sufficient to provide them with a home. Some portion of these will have money independent of their profession, others will succeed to Headmasterships of Preparatory Schools. Some few will be in Holy Orders and get clerical preferment. I am confident that, as things stand at present, this is a generous calculation. How shall we provide for the remainder?

To expect that any profession should, for *all* who enter it, provide a home and maintenance for a family, is certainly to expect more than will be got. Let us, therefore, consider ourselves responsible for two out of the three quarters that remain at present unprovided for. That is, we have to account for one half. I hope and believe that this can be done.

The first change, a change without which absolutely no improvement is possible in the position of the Assistant Masters, must come from *within*. The potential Assistant Master must be trained to his business, apprenticed to his craft. This alone would revolutionise his position. It is impossible here to enter into details in defence of such an assertion; a few only of the leading points can be noticed. The supply would be immediately reduced, and reduced in the best possible direction. There would drop off the uncertain, the amateurs, the weak, the incapables. The remainder would be instructed and skilled members of their profession. They would all be registered, according to a system provided for this purpose by Government. The incompetents would be reduced to a minimum. For two out of three of this body of trained men we have to provide homes. Already we may discern some tendencies favourable to the Assistant Masters, especially to a body trained and equipt for their work.

Among the most encouraging of these is the following. It is becoming more common than it used to be for a Headmaster to pass on his school to one of his Assistants, and the tendency undoubtedly seems to be in the direction of making this custom increasingly common, so much so that I believe we may assume that, for all practical purposes, we may look forward to a day

not far distant, when it will be a very general practice. This alone would be an incalculable boon to Assistant Masters. The statement of all the grounds for this belief would carry me too far afield. I will limit myself to the mere mention of two.

1. As stated above, every well-established Preparatory School will have its own history, traditions, sources of supply, methods, and even idiosyncrasies. The introduction of a stranger ignorant of all this as head of so small a society would be attended with much risk, risk moreover which it will be quite unnecessary to run. For we start with the assumption that the staff of Assistant Masters has been trained to its craft and is thoroughly efficient. Further, the closer the scrutiny the clearer does it become that the previous training for and the work of a Preparatory School have a distinctness of their own, and that a stranger would but be intermeddling with them,

2. An Assistant Master known to the parents, past and present, and to the "Old Boys" of the school, would be likely to be more acceptable to them than a stranger. And this fact alone will count considerably in favour of his being appointed instead of an outsider.

This single fact—the fact that the Headmaster may be expected to select his successor from his own staff—at once places the Assistant Masters in a totally different position from that which they now occupy. The full appreciation of the difference is possible to a Preparatory School Master alone. To him I am confident that I should not appear to be using the language of exaggeration if I were to characterise such a change in his position as a revolution—a revolution profoundly bettering for him the whole condition, status, and prospects of the profession.

Further enlargement upon this subject is impossible here. Enough, I hope, has been said to enable the interested reader to supplement for himself.

Postulating, then, a well-trained and thoroughly equipt staff, one of whom is likely to succeed to the Headmastership of the School, what further possible openings are there leading to the proposed end of a modest competence and a home?

The Government, it may be confidently expected, in their desire to secure the best Inspectors and Examiners of Preparatory Schools, will usually make their selection from those who, in addition to being trained experts, alone are cognisant from within of the particular circumstances of these schools. There seem, further, good grounds for supposing that, if the element of hope were to enter more largely into the life of the Assistant Master, there might be elaborated a Pension Scheme likely to meet with more success than has at present attended the efforts made in that direction.

Again, one of the best and most immediately practical remedies would be found if the Public Schools, great and small, would occasionally open their doors to Preparatory School Masters when vacancies occurred on their staff. A master trained to his business, and with an experience of some years in a good Preparatory School at his back, would be a valuable addition to the staff of

any Public School. It seems, indeed, to be clear, even in the comparatively few cases in which this has been done, that experience has justified the experiment. By the supposition, none but trained, experienced, and successful Assistants would have a chance of being accepted, and this consideration would, in its turn, encourage them to make themselves a success in their Preparatory School. It would be one of the means of giving hopefulness to what is now usually an almost hopeless outlook.

Last, and in some respects most interesting of all. Assuming what has been stated, or may be naturally inferred therefrom, as to the position and prospects of the Assistant Master—an expert in his profession, well known among the parents and old boys of the school, and a probable successor to the Headmastership—is there any reason why there should not be set on foot, to take operation after some stated period of years of faithful service, some system of profit-sharing, by the operation of which there might be brought about a greater equalisation, not merely of the pecuniary profits of the school, but of its burdens, risks, and responsibilities? Such a proposal may well be expected to be received with a good deal of general surprise and distrust. It has not been advanced without much deliberation, nor without the firm conviction that the present generation of Preparatory School Masters will not have ceased to exist before it has been put into motion in some schools, with results of such large benefit to the schools and the boys and masters of the same as I will not trust myself now to forecast.

It is difficult to believe that, when the circumstances of the present situation are fully appreciated, some means will not be adopted to remove what I must repeat is to be regarded as nothing less than a blot upon the profession affected by it. I hope from my heart that I may not prove to have been mistaken, and that by some such means as those mentioned above the prospects of a body of men who are working devotedly and unostentatiously in their various schools may be more hopeful than they can fairly be regarded as being, under the present conditions. How closely bordering upon hopelessness those conditions now are, and how revolutionised that lot would be by the presence of hope is known only to these men themselves, and known to them also in exact and cruel proportion to the number of years of work that lie behind them.

C. C. COTTERILL.

PREPARATORY SCHOOL EQUIPMENT.

SYNOPSIS OF CONTENTS.

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- (b) Age of Boys.
- (c) Size of School.
- (d) Staff.
- (e) Forms or Classes.

II.—THE SCHOOL HOUSE.

- (a) School and Class Rooms.
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III.—ACCESSORY BUILDINGS.

- (a) Chapel.
- (b) Sanatorium.
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- (d) Swimming Bath.
- (e) Carpenter's Shop.

IV.—GAMES, ETC.

- (a) Playgrounds.
- (b) Fives, Tennis Courts.
- (c) Gardens.

PREPARATORY SCHOOL EQUIPMENT.

PART I.

STATISTICS.

Questions referring to the subject of Equipment were sent to 252 schools.

An analysis of the answers furnished by 120 schools gives the following results:—

I. THE SCHOOL—

(a) *Boarding and Day Schools.*

Boarders only are received in 66 schools.

Day boys and boarders received in 53 schools.

Day boys only are received in 1 school.

Taking the whole number of boys in the 120 schools.

Boarders are 82% of the whole.

Day boys are 18% of the whole.

Taking the 54 schools in which day boys are received.

Boarders predominate in 37 schools.

Day boys predominate in 17 schools.

(b) *Age of Boys—*

Average age { at entrance $9\frac{1}{2}$ years.
at leaving $13\frac{1}{2}$ years.

(c) *Size of School—*

No. of Boys.	No. of Schools.
Under 20	22
20—30	29
30—40	26
40—50	16
50—60	13
60—70	8
Over 70	6

Average number of boys per school 36.34.

(d) *Staff—*

(i.) Resident, or exclusively attached to the school.

Masters, 471 }
Mistresses, 59 } = 530, average 4.41 per school.

(ii.) Visiting.

Masters, 229 }
Mistresses, 85 } = 314, average 2.7 per school.

Graduates.

Oxford and Cambridge, 375 }
 Other Universities, 46 } = 421.

Average number of boys to each teacher.

(i.) (Resident) 8.22 }
 (ii.) (Visiting) 13.9 } Boys per teacher.
 (i. and ii.) together 5.17 }

(e) *Forms*—

Average number of { Forms per school, 4.55.
 { Boys per form, 8.07.

II. THE SCHOOL HOUSE.

(a) *School and Class Rooms.*

Average number of { rooms per school 3.63
 { boys per room 10.0

(i.) *Desks*—

To the question as to the kind of desk used or preferred, 104 answers were given.

40 use or prefer Single Desks.

8 " " Dual Desks.

7 " " Single or Dual.

33 " " Continuous.

8 " " Both.

(8 consider the form of desk immaterial.)

To the question as to "fixed" or "reversible"

Desks, 81 answers were given. Of these

44 favour the fixed desk

20 favour the reversible.

(ii.) *Lockers.*

To the question "should each boy have a private cupboard for books and other possessions?" 109 answers were given.

102 consider a locker desirable, but 9 add "not locked."

(b) *Other Rooms used for School Purposes.*

To the question as to the desirability of having separate rooms for Library, Music Room, Museum, Play Room, the answers received were as follows:—

—	Answers.	Yes.	No.
Library - - - -	96	65	26*
Music Room - - - -	96	87	9
Museum - - - -	65	43	18*
Play Room - - - -	100	92	3†

* 5 suggest a combination of Library and Museum.

† 5 suggest a combination of Playroom and Gymnasium.

Note (i.) *Museum.*

Six questions were asked on the subject of school museums, besides the question (already mentioned) as to the desirability of a separate room for this purpose.

To some or all of the six questions answers were received from 35 schools, of which 33 have or have had museums.

— —		Yes.	No.
1. Limited to Natural History !	- -	3	20
2. Much used !	- - - -	10	8
3. Managed by boys !	- - - -	13	8
4. Useful in teaching Science	- - -	7	6
5. " " " Geography	- -	5	8
6. " " " History	- - -	5	7

In nine cases the museum is described as "undeveloped," "fragmentary," etc.

(ii.) *Lantern.*

To the question as to the use of the Lantern in illustrating lessons 105 answers were given. Yes, 26. No, 47. Other answers, 32.

The latter were usually to the effect that, though not applied directly to the illustration of lessons, the lantern is used for lectures on various subjects.

(c) *Dormitories.*

To the question as to the respective advantages of cubicles and open beds—

108 answers were received.

93 use or prefer open bedrooms.

10 " " cubicles.

5 use both.

Of the 93 who prefer open bedrooms, 11 are emphatic in their preference; two remark that cubicles are popular with parents.

Of those who prefer cubicles, one adds "certainly," another "not more than 5ft."

Maximum number of beds per room desirable.

85 answers average 8.3.

In several instances the remark is added "minimum three, except for brothers."

Cubic capacity desirable for bedrooms.

66 answers average 700 cubic feet per bed.

(d) Lavatory, Closets etc.

43 answers.

20 prefer or use the earth system.

18 " " water.

3 of the latter definitely express a preference.

5 recommend that closets should be outside.

*(e) Lighting, Warming, and Ventilation.**(i) Lighting.*

112 answers.

67 use or prefer gas (31 incandescent).

16 " " oil (3 add " by choice ").

25 " " electric light.

4 " " acetylene.

It is not clear how far these figures represent the actual practice; it is evident that some give the light which they would prefer, others that which they use. Electric light is apparently actually used in eight or nine instances, and would probably be preferred by a very much larger proportion than 25 out 112.

(ii.) Warming.

110 answers.

59 use or prefer open fires

33 " " open fires and pipes.

14 " " hot water pipes.

4 " " stoves.

(iii.) Ventilation. See Part II.

III. ACCESSORY BUILDINGS—

(a) Chapel.

26 schools have a private chapel.

(b) Sanatorium.

51 have a sanatorium detached.

17 " " not detached.

(c) Gymnasium.

70 have a covered gymnasium.

13 " an open "

12 use a public "

80 employ a gymnasium instructor.

(d) Swimming Bath.

22 schools have a swimming bath.

29 " use public baths (often reserved).

13 " " sea, river, or lake.

18 " have an instructor, and in many other instances swimming is taught by the masters.

Preparatory School Equipment. 33

Of the 22 swimming baths four are heated, 12 are not heated, and in six cases the answer leaves it doubtful.

- (e) *Carpenters' Shop.*
91 schools have a carpenters' shop.
81 of these „ an instructor.

IV. GAMES.

- (a) *Playgrounds.*
103 answers give an average of 6·7 acres.
- (b) *Fives and Tennis Courts.*
45 schools have Fives or Squash Racquet Courts
44 „ „ Lawn Tennis Courts.
- (c) *Gardens.*
53 schools have boys' Gardens.

Summary of Averages and Percentages.

ESSENTIALS.

	Per School.	Per Teacher.	Per Form.	Per Room.
Boys - - -	36·34	8·22	8·07	10·0
Resident Teachers -	4·41	—	·97	1·21
Forms - - -	4·55	1·03	—	1·25
Class-rooms - -	3·63	·82	·8	—

ACCESSORIES.

	Out of 120 Schools.	Per Cent.
Museum - - - -	33	27·5
Chapel - - - -	26	21·7
Gymnasium, covered -	70	58·3
„ not covered -	13	10·83
Sanatorium, detached -	51	42·5
„ not detached	17	14·17
Swimming bath - -	22	18·3
Carpenters' shop - -	91	75·83
Fives courts - - -	45	37·5
Tennis courts - - -	44	36·7
Gardens - - -	53	44·17

PART II.

BOARDING AND DAY SCHOOLS.

It is sufficiently obvious that the typical Preparatory School is a Boarding School. More than half of the 120 schools under consideration take boarders only, while in most of the schools where day boys are received the boarders form a very large majority of the pupils.

Without attempting any discussion of the respective merits of the two systems, it may be pointed out in partial explanation of the above facts; firstly, that the Preparatory School simply follows the example of the Public Schools, to which it professes to form a stepping-stone; secondly, that there are not very many neighbourhoods, where, within a practicable radius, boys intended for the Public Schools can be found in sufficient numbers to justify the establishment of a Preparatory Day-school; thirdly, that though parents are ready enough to pay liberally for Board and Tuition combined, the fees ordinarily obtainable for Tuition alone are hardly remunerative in schools of the class under consideration, unless the number of pupils is exceptionally large. How far education may be regarded as a "commodity," and therefore subject to the laws that govern the prices of other commodities, is a question for political economists; but if educational endowments can be considered as in any way parallel to "bounties" in manufactures, we may, perhaps, find in the existence of such endowments some explanation of the very low money value at which education is commonly estimated.

SIZE OF SCHOOL.

It may be safely assumed that a majority of the smaller schools have not, as yet, their full complement. Though, therefore, the figures given above show the average actual number, they furnish no indication of the opinion of headmasters as to the desirable maximum and minimum.

Without attempting to determine the ideal number, it may be pointed out that with moderate numbers it is undoubtedly easier to maintain more completely the quasi-domestic atmosphere which is a characteristic of most Preparatory Schools—a characteristic appropriate and desirable in an institution which stands mid-way between the Home and the Public School. On the other hand—and this consideration is perhaps less obvious to the public than it is to schoolmasters—the difficulty of organising efficiently and economically the work of the school is considerably greater with small numbers than with large. A necessary condition of efficient organisation is that there shall be sufficient forms or classes to secure a due gradation of standard among the classes, and at the same time a tolerable level of proficiency within each class. If we consider the fact that a boy's preparatory school life covers $3\frac{1}{2}$ to 4 years, and that his classical work ranges from the First Declension to Cicero and Virgil,

Thucydides and Euripides, it is tolerably obvious that five classes are by no means too many, while six or more will probably give better results. With a school of, say, 40 boys, the division into five classes is perfectly practicable: where the numbers are much lower, such a distribution is still, of course, possible, but it would involve a disproportionately large staff.

STAFF.

The very liberal proportion of teachers to pupils and the smallness of the forms (on the average) are perhaps the most distinctive features of the typical Preparatory School. The figures given above show an average of 3.22 boys per teacher, taking into account resident teachers only; but it is possible that the real average would show a still more liberal proportion. For while on the one hand there may be cases in which one of the resident staff is exclusively engaged in teaching "out of school" subjects, *e.g.*, Music—cases which should no doubt be excluded in reckoning the average—on the other hand there are probably many more cases in which Visiting Masters or Mistresses teach some subject which forms a part of the regular curriculum, *e.g.* French, German, Writing, etc.

The above figures seem to show that as regards numerical strength the staff of the typical Preparatory School is fully adequate. As regards its efficiency, we see that a very large proportion (89 per cent.) of the masters are graduates, and though a degree is in itself no guarantee whatever of efficient teaching, it is, and for generations has been, practically the only qualification recognised in Secondary Education. The movement in favour of the special training of teachers has the sympathy of a considerable number of headmasters both of Public and of Preparatory Schools, but in both classes of school the number of teachers who have been able or willing to avail themselves of the recently established courses of training is necessarily small at present. Experience has been, and still is the main, if not the only, road to efficiency, and efficiency can only be judged by results.

FORMS.

In attempting to determine the ideal size for a Form or Class in a Preparatory School, the following considerations may be of some help.

In Classical Forms—and Classics necessarily occupy a large proportion of the working hours—it is undoubtedly an advantage if every boy can be "set on" in the course of every lesson; and while composition is being done, it is at least desirable that the master should be able to look over the work of the previous composition lesson with each boy in turn. Far better results are obtained in this way than by correcting the written work "out of school," and returning it to the boys. The fulfilment of both these requirements is perfectly possible where the form consists of ten boys, and is easy with a smaller number.

The actual average in the 120 schools is 8.07 boys per form, so that in this respect the ideal may be fairly said to have been attained.

SCHOOL AND CLASS ROOMS.

The schoolroom should, of course, be capable of accommodating the whole school at once, but unless it is likely to be fully occupied for a considerable length of time at one stretch, it is hardly necessary to provide so large an area per head as is desirable in class-rooms. In ordinary cases an allowance of 20 square feet per head would be fairly liberal. The schoolroom is, of course, generally used as a class-room for at least one form; in many cases it is necessary that it should be used for two; and, though it is desirable as a rule that each class should be taught in a separate room, there are occasions where the schoolroom may with advantage be used for two forms, as when the headmaster desires to supervise the work of an inexperienced teacher. In actual practice we find that there are 547 forms to 436 rooms and an average of 10 boys per room, from which it may be inferred approximately that there are 111 rooms in which two classes are taught.

For a form of 10 boys a classroom measuring 18 ft. 6 × 16 × 6 will give the 30 sq. ft. per boy which is considered by experts to be an ample allowance. As, however, it is generally impossible to maintain exact uniformity in the size of the forms, one or more of the classrooms may with advantage be somewhat larger, especially if these rooms are used for other purposes, *e.g.*, as music-room, library, etc.

Area is a more important consideration in class-rooms than cubic capacity, but a room of the size suggested above should be about 12 ft. in height. The windows should run nearly or quite to the ceiling, and the light should fall on the pupil's left shoulder as he sits to write.

Assuming that the classrooms are of the size suggested above and that the schoolroom is equal to two classrooms, the actual room area in the 120 schools would give 37 sq. ft. per boy.

DESKS.

The subject of school desks is fully treated and various models are discussed in Barnett's *Teaching and Organisation* and Robson's *School Architecture*. Experts appear to be practically unanimous in favour of the single desk as opposed to the continuous; the advantages of the single desk in the maintenance of order are sufficiently obvious, but as ordinarily constructed the desk is far too narrow to afford real comfort in writing, especially when the boy is doing written work involving the use of dictionary and grammar besides the text-book; and much of the work in Preparatory Schools is of this kind. If space would permit, single desks at least 2 ft. (better 2 ft. 4 in.) in width would perhaps be best; but, with a proper gangway, this measurement would be possible only where the classrooms are exceptionally

large or the classes exceptionally small. Dual desks, say 4ft. 6in. or even 5ft. wide, *with separate seats*, preserve all or nearly all the advantages of the single desk, and afford much more table room to each boy without occupying any more floor space than two single desks of the ordinary size. Such a desk is practically two single desks with the intervening gangway bridged.

Box desks have some advantages, but these are perhaps outweighed by the objections. Such desks afford "cover for illicit playing" and are liable to become receptacles for perishable goods and even for live stock. They are rarely large enough to contain all the books that a boy uses in school, and unless he does all his work in the same classroom, which is not often the case, it is practically necessary that he should have a shelf or locker elsewhere.

Reversible desks (*i.e.*, desks so constructed that the table can be turned over to form a back to the seat) are certainly convenient when "place taking" is the method of marking adopted in the classroom; but they are open to the serious objection that when used for writing the seat has no back. They may, perhaps, be most legitimately used in the schoolroom, or at least in that part of the schoolroom that is not used as a classroom. The ideal classroom furniture for a Preparatory School would, perhaps, consist of single or dual desks, as described above, supplemented by two or three short moveable benches (with backs), which can be arranged round or in front of the master's desk.

A discussion of the various systems of marking would be inappropriate here; but, as "place-taking" is only possible under certain conditions as regards classroom furniture, it may, perhaps, be pointed out that the disadvantages of this system are less serious where the forms are small, while its advantages are more conspicuous in dealing with quite young boys, to whom the "visible sign of success" is often a very valuable stimulus. Many and weighty objections have been urged against this system by Mr. A. Sidgwick (in *Barnett's Teaching and Organisation*), but the "unfairness" with which he charges it may be, and often is, largely remedied by "numbering off" three or four times during the lesson, and taking the totals, or the average, at the close. The process does not take two minutes, and gives a result which is perhaps as trustworthy as any that can be arrived at by a system which involves passing questions from one boy to another. Mr. Lyttelton, though he inclines to think that "place taking is indispensable," points out that it "discourages the duller members of the form, who have repeatedly to announce the single figure, about which there can be no delusion to buoy up their spirits in any way." This objection, again, can be partly met by numbering *down* from a higher figure than that corresponding to the number of the class. Thus, in a class of twenty-five boys the numbers run not from 25 to 1, but from say 40 to 16. The disproportion between the highest and the lowest mark is not so glaring, and though, of course, there is no difference in the final result, the "dullest members" of the Form do not, as a rule, discover this.

LOCKERS.

For school books, a locker or shelf for each boy is practically necessary. Where space will allow, these are best placed in corridors where they are accessible without causing disturbance to any class; where this is impracticable, the school-room is perhaps the most convenient place. "Lockers" (not necessarily, and perhaps better not, locked) are neater in external appearance than open shelves; but they are open to some of the objections already urged against box-desks; moreover, with the use of open shelves, it is easier to encourage orderly habits by insisting upon the books being neatly arranged.

OTHER ROOMS.

Special rooms for library, music, etc., must be regarded as luxuries rather than necessities. It is desirable that there should be one room where boys can read quietly, but there is no reason why one of the classrooms should not be set aside for this purpose out of school hours. This will be the library; and the museum (if there is one) may be very well combined with it, unless either the museum or the library is very extensive. Similarly music may be taught in one or more of the classrooms, unless, of course, it is taught in school hours. For piano practice a set of cells, with sound-proof partitions, is the ideal arrangement; but this is, perhaps, beyond the reach of most Preparatory Schools.

A "play-room," where no restriction is placed upon noise, is, if not an absolute necessity, a very great convenience; but where there is a covered gymnasium attached to the house, it may very well be used for this purpose.

MUSEUM.

The figures given above show that only 33 schools out of 120 have museums, and that the balance of opinion is rather against their utility. It is difficult to see how a museum can be of much direct value for educational purposes, unless it is such as to illustrate some one branch of knowledge with tolerable completeness. A museum that would be of real use in teaching Science, Geography, and History would be, in most cases, quite unattainable. The Preparatory School Museum, where it exists at all, is usually a very miscellaneous assortment of objects which defy classification, and the chief interest lies in the actual process of collection. One headmaster recognises this so thoroughly that he recommends the dispersal of the collections once a year.

LANTERN.

That the lantern might be a very useful help in teaching certain subjects, there can be little doubt: but its systematic use in teaching, say, history or geography, would require a large and costly collection of slides, selected and arranged by someone

possessing special knowledge of the subject. Such a collection would be beyond the reach of most individual schools, but a combination might possibly be organised to share the cost of the slides and arrange for their circulation.

DORMITORIES.

A full consideration of the respective merits of cubicles and open dormitories would involve the discussion of a very difficult question. It is sufficient here to note that of the 108 headmasters who have in their replies expressed an opinion on this very important point, there is a strong majority (93 to 10) in favour of open dormitories.

The maximum number of beds per room, suggested by Dr. Dukes in Barnett's *Teaching and Organisation* (16), is very nearly double the average derived from the answers of 85 Preparatory Schoolmasters, viz., 8.3. "Safety in numbers" is, no doubt, the theory that underlies much of the preference for open dormitories; but when once the number has been reached which will secure the existence of something like "public opinion" in the room, there appears to be no advantage and some disadvantage in multiplying beds. The number by which this desirable result may be attained cannot, of course, be fixed precisely, but 16 seems unnecessarily high for Preparatory Schools.

LAVATORY, ETC.

The answers tabulated above show a slight preference for the earth system, but this, of course is only possible, under certain conditions as regards situation. Whatever sanitary system may be adopted, simplicity of construction, facility for inspection, and constant watchfulness are essential to its successful working. A liberal provision of closets is desirable, say one to every seven or eight boys, besides one or more easily accessible from the dormitories. In the lavatory the fittings should be as strong and simple as possible; a basin to every five or six boys is a fairly liberal allowance. A dressing-room, for changing before and after games, is almost a necessity in a school of any considerable size. It should be easily accessible from the lavatory, but is perhaps better separated from it. To the dressing-room a drying closet is a very valuable addition, and, where hot-water pipes are used at all, its construction is a matter of no great difficulty or cost. With regard to bath-rooms, one to every six or seven boys is an ample allowance.

LIGHTING.

The question of lighting hardly admits of any discussion. Electric light is by common consent the best, but its adoption is, of course, not always practicable.

WARMING.

With regard to warming, there is a strong majority in favour of open fires. Where both fires and hot-water pipes are used, the latter are in most cases supplementary, and are used for corridors, gymnasiums, etc. It may be reckoned then, that 83 per cent. of those who answered the question on this subject prefer fires for warming the inhabited rooms. This preference is no doubt largely determined by a recognition of the fact that open fires are a material aid to proper ventilation.

VENTILATION.

To the question on the subject of ventilation, 98 answers were received, so miscellaneous in character that it is practically impossible to tabulate them. Tobin's shafts, false window sills, and fanlights recur frequently among the methods recommended. There is practical unanimity as to the desirability of open windows, but perhaps hardly sufficient recognition of the fact that an open window does not always act as outlet or inlet exactly as is intended or required; and, further, that, whatever form of outlet be provided, it generally requires some assistance—artificial heat, wind pressure, or the mechanical action of revolving fans—to secure its proper working. This is especially the case in summer. The inlet should provide a minimum of $2\frac{1}{2}$ square inches per head and should admit a continuous stream of 15 to 20 cubic feet of air per head per minute.

ACCESSORY BUILDINGS.

That large schools, numbering their pupils by hundreds, and frequently assisted by endowments, should be able to provide chapel, gymnasium, sanatorium, swimming bath, etc., is not very surprising; but it is at least noteworthy that these accessories—desirable but not absolutely essential—should be found in so large a proportion of schools whose average number of pupils is under thirty-seven. Especially noteworthy is the large number of instances in which a carpenter's shop is provided. The desirability of some manual training being included in Secondary Education has only recently been recognised, and the fact that ninety per cent. of the schools under consideration should already have made some provision for such training is at least remarkable.

PLAYGROUND, ETC.

The average extent of the playgrounds given above (viz. 6.7 acres) is probably somewhat misleading. In several instances there are, attached to schools in the country, grounds of 30 or 40 acres of which only a small part can be considered "play-ground" in the ordinary sense. An acre to every ten boys is a fairly liberal allowance; so that, even if the above figures were reduced by one-half, it would still indicate a good average equip-

ment in this respect. A "dry" playground of gravel, or better still sand, is a very valuable addition; this must of course adjoin the school-house. It is, no doubt, preferable that the cricket and football field should also be within the school grounds, but in suburban districts and other places where land is especially costly, this is often impracticable.

The replies do not indicate much enthusiasm in favour of gardens. In ten cases out of fifty-three the answer given is to the effect that boys can have gardens "if they choose," and in three cases they have been found a failure.

CONCLUSION.

In conclusion it may be pointed out that the typical Preparatory School is entirely unendowed; it is therefore exposed to free competition, and depends for its very existence on its efficiency. Again, it is comparatively a new institution, and cannot therefore boast of—what is at once an invaluable possession and a serious obstacle to improvement—a body of ancient tradition. How far the absence of tradition is to be counted for gain or for loss need not be discussed here; but free competition may probably be reckoned among the efficient causes of the high standard of equipment, intellectual and material, shown by the typical Preparatory School.

FRANK RITCHIE.

THE TIME-TABLE OF WORK IN PREPARATORY SCHOOLS.

ATTEMPTED CLASSIFICATION OF PREPARATORY SCHOOLS.

Preparatory Schools are one of the results of specialisation in education. They do nothing but prepare boys for the Public Schools, and even within that limitation there is a tendency among them to specialise yet further. Roughly speaking, they may be said, for the purposes of our subject, to be classified into four categories:—(1) Schools that make a special point of competing for scholarships; (2) Schools that do not compete for scholarships; (3) Schools that are specially preparatory for a particular public school; (4) Schools that prepare for the navy. It must, however, be distinctly borne in mind that there can be no hard-and-fast line drawn between these four classes; but there does exist a tendency in these directions, and many of the time-tables that have been returned clearly show to which class their particular school belongs, although in others the gradations are so varied and imperceptible that classification is impossible.

SCHOLARSHIP SCHOOLS.

Every year a very large number of valuable entrance scholarships are given by the public schools as the result of competitive examinations. To many parents, for various reasons, it appears a matter of great importance that their sons should win one of these. The different examinations vary in detail at various schools both as to standard and subjects set. Some preparatory schools make a speciality of learning these differences and of preparing boys for success in particular scholarship examinations, in this way appealing to parents who greatly desire scholarships for their sons. These schools are not, however, divided from other preparatory schools by a hard and fast line, because there are always among their scholars a considerable percentage who will be unable to rise to a higher standard than that of the simple pass examination, and also because of the variations in the scholarship examinations themselves. If the boy "A." were sure to win a scholarship at "B." school, he might, perhaps, for example, entirely drop French at his preparatory school; it

is, however, most probably a matter of some doubt if he will be successful, and if he fails there he will try again at "C." school, and at "C." French may well be essential, while the Latin verses that were perhaps emphasized at "B." are discouraged at "C." In this way absolute specialisation is prohibited, but the tendency will be found clearly marked on many time-tables, both by the exaggerated weight given to the subjects that specially count at these examinations, and often, too, by the longer hours devoted to lessons.

NON-SCHOLARSHIP SCHOOLS.

Schools that do not compete for scholarships, and whose pupils are drawn for the most part from a more wealthy class of parent than is the case in the scholarship schools, often approximate so closely to the scholarship school as to be hardly distinguishable. They are encouraged to keep up the standard of work not alone by the desire of their headmasters to do the best for their boys, but also by the pride of the greater number of their parents which prompts them to covet at least a respectable place for their sons at the entrance examinations. Further, it is also undoubtedly true that the number of schools that never attempt to win scholarships is small. In the case of these non-scholarship schools, however, as the standard of the entrance examination at a public school is far below that of the examination for scholarships, the time-table may be less crowded, and it is possible for their headmasters to some extent to give scope to their own ideas on education.

SCHOOLS PREPARATORY TO A PARTICULAR PUBLIC SCHOOL.

During quite recent years it has become increasingly the practice for public schools to have preparatory branches of their own. In the old days these schools used to have boys of all ages, from nine to nineteen, living together under similar conditions. The very strong belief which has now obtained that such a system is absolutely evil has constrained most of them either to form separate preparatory branches or to refuse boys under thirteen. The preparatory schools thus formed are not very numerous as compared with those which are entirely independent. They are almost the sole exception to the rule that preparatory schools are neither aided by outside funds nor subject to outside authority.

There are, too, a limited number of schools owned in the ordinary way that have made a speciality of preparing for one particular public school. They are, in fact, chiefly confined to preparing for Eton and Harrow. In both these types of preparatory school it is obvious that the time-tables must be entirely

governed by any peculiarities that show themselves in the curricula of those schools for which they specialise. They will, however, still retain a family likeness to the time-tables of the other schools, because just as preparatory schools prepare for public schools, so do the latter prepare for Oxford and Cambridge, and the *κῶδος* attaching to the more famous courses of academic study is reflected downwards.

NAVY SCHOOLS.

The recent change effected by the Admiralty in the examination for the "Britannia" by raising the age of candidates to fifteen and a-half, has taken it beyond the limit at which preparatory school headmasters consider it advisable for boys to remain with them. Matters are, therefore, at present more or less in a state of uncertainty, but it seems probable that preparatory schools will entirely cease to attempt this special work, and will instead be compelled to pass boys at a premature age to the public schools. Before the recent change took place those schools that prepared for the Navy were virtually members of the last-named class, the "Britannia" being substituted for some public school. As matters stand at present, however, it is obvious that details concerning them must be either obsolete or speculative.

ACTUAL TIME-TABLES.

Annexed will be found three time-tables at present in actual use in different schools. They will show at a glance the way in which the time allotted to various subjects is apportioned by the three classes of school with which we have to do. Two forms only are given in each school, the top form and the bottom form, or the form whose age average most nearly approximates to the period between nine and ten years. These are selected because, as a rule, boys enter preparatory schools about the age of nine years and they leave about the age of thirteen and a-half. Table No. 4 has been compiled from a comparison of returns sent in from different schools, and shows the average time given to the different subjects in parallel forms in the aggregate of schools. As a standard of comparison it may perhaps be useful.

In the subjoined tables, the times are given in hours and minutes.

No. I.—TIME-TABLE of a School that does compete for Scholarships.
Number of Boys in School, Summer 1899, 53.

	Class I. Average age 10 $\frac{5}{12}$.	Class V. Average age 12 $\frac{11}{12}$.	
Scripture - - - - -	2	1.45	
English A - - - - -	2	0	
French - - - - -	2	3	
Latin - - - - -	6	11	
Greek - - - - -	0	5B	
German - - - - -	0	5B	
History - - - - -	2	1	
Geography - - - - -	2	1	
Mathematics - - - - -	4	6	
Object Lessons or Elementary Science - - - - -	0	0	
Writing and Dictation - - - - -	3	.45	
Drawing - - - - -	1	1	
Preparation (κ) - - - - -	6	9	
Total - - - - -	30	39.30	
Singing - - - - -	1		Optional subjects in addition to those above.
Instrumental Music - - - - -	3		
Carpentering or Handicraft - - - - -	1.30		

A. This includes English Language, Literature, Grammar, and Composition. B. Alternative subjects. K. In Tables I, II, III, and V. there is no return showing to which subjects, or in what proportion the time awarded to preparation is allotted. Practice varies not only as between school and school, but even between the various forms of the same school. It may, however, be assumed that a very large proportion of the preparation time is given to Classics or Mathematics, or to both.

No. II.—TIME-TABLE of a School that does *not* compete for Scholarships.
Number of Boys in the School, Summer 1899, 40.

	Class I. Average age 10 $\frac{1}{12}$.	Class IV. Average age 13 $\frac{1}{12}$.
Scripture - - - - -	5.0	5.0
English A - - - - -	3.45	1.30
French - - - - -	3.0	3.0
Latin - - - - -	4.30	5.30
Greek - - - - -	0.0	3.30B
German - - - - -	0.0	3.30B
History - - - - -	1.30	1.30
Geography - - - - -	1.30	1.30
Mathematics - - - - -	4.30	6.45
Object Lessons or Elementary Science - - - - -	1.0	1.0
Writing and Dictation - - - - -	2.15	0.45
Drawing - - - - -	1.0	2c.0
Preparation (κ) - - - - -	0.0	2.0
Singing - - - - -	3.0	3.0
Instrumental Music - - - - -	2.0	2c.0
Carpentering or Handicraft - - - - -	2.15	2.15
Total - - - - -	35.15	39.15

A. See note to Table I. B. Alternative subjects. c. Alternative subjects.
κ. See note to Table I.

No. III.—TIME-TABLE of a School preparing for special Public School (Scotch). Number of Boys in the School, Summer 1899, 54.

	Class II. B. Average age 10 $\frac{1}{2}$.	Class IV. Average age 13
Scripture - - - - -	2	2
English A- - - - -	3.45	3
French - - - - -	6	3
Latin - - - - -	0	6
Greek - - - - -	0	0
German - - - - -	0	0
History - - - - -	1.30	1
Geography - - - - -	1.30	1
Mathematics - - - - -	5.45	5.45
Object Lessons or Elementary Science - - -	0	0
Writing or Dictation - - - - -	3	1.45
Drawing - - - - -	0	0.45
Preparation (K) - - - - -	6.15	6.15
Singing - - - - -	1	1
Instrumental Music- - - - -	2c	2c
Carpentering or Handicraft - - - - -	1	1
Total - - - - -	31.45	32.30

A. See note to Table I.

B. Class II. is shown as more nearly approximating average age than Class I.

c. Optional subject .

K. See note to Table I.

No. IV.—AVERAGE of time given to various subjects as shown by comparison of returns that have come to hand.

	Class I., or class most nearly averaging age of 9—10.	Top Class. Age Average 13
Scripture - - - - -	2.12	2.3
English A - - - - -	2.49	1.10
French - - - - -	2.49	3.8
Latin - - - - -	5.49	7.49
Greek - - - - -	0	4.34
German - - - - -	0	3.41B
History - - - - -	1.57	1.50
Geography - - - - -	1.41	1.17C
Mathematics - - - - -	5.23	5.38
Object Lessons or Elementary Science - -	0.57	0.53D
Writing or Dictation - - - - -	2.25	0.53E
Drawing - - - - -	1.31	1.39F
Preparation - - - - -	G	G
Total H - - - - -	29.84	35.2

- A. See note to Table I.
- B. Usually German is alternative with Greek, with extra French and Mathematics ; 58·6 per cent. of the Schools do not teach German at all.
- C. 3·7 per cent. omit Geography entirely ; 6·2 per cent. do not teach it to their top form.
- D. 72·5 per cent. omit this subject entirely ; 83·7 per cent. do not teach it to the top form.
- E. One school omits it entirely ; 38·7 per cent. do not teach it in the top form.
- F. In 34·2 per cent. of returns it is an optional subject. The above is the average in the remaining 65·8 per cent.
- G. No average is possible, practice varies so greatly.
- H. The average total given above is not the sum of the various items of the table, but is the average of totals actually returned in each school. No school teaches *all* the subjects enumerated.

It is unfortunately impossible to show in a similar manner the work in the forms intervening between the ages of nine and thirteen, because no two schools have similar form organisations. In one case there are as many as twelve separate forms for boys between the ages of nine and a-half and twelve and a-half, on the other hand there are often not more than one or two ; but as illustrating the gradation of work, and in particular as showing the stage at which Greek Algebra, and Euclid are commenced, the subjoined time-table (No. 5) (a school that

sometimes but not regularly competes for scholarships) may be taken as a fairly accurate representation of the general practice.

No. V.—TIME-TABLE of a School that does sometimes compete for Scholarships, illustrative of intermediate classes, and of the ages at which Greek, Algebra, and Euclid are commenced.

	Class I. Average age 9½.	Class II. Average age 10½.	Class III. Average age 11½.	Class IV. Average age 12½.	Class V. Average age 12¾.	Class VI. Average age 13½.
Scripture	1.30	1.30	1.30	1.30	1.30	1.30
English	1.50	2.0	1.40	1.40	1.40	.85
French	2.30	2.30	2.15	2.15	2.15	2.15
Latin	7.0	9.15	7.20	7.50	7.50	7.20
Greek	—	—	A 4.0	3.40	3.10	5.5
German	—	—	—	—	—	—
History	1.30	1.30	1.30	1.30	1.30	2.5 B
Geography	2.30	2.35	.50	.50	.50	.50
Mathematics { Arithmetic	5.15	5.25	1.40	1.40	1.40	1.40
Algebra	—	—	1.40	1.40	1.40	1.40
Euclid	—	—	2.0	2.0	2.0	2.0
Object Lessons	—	—	—	—	—	—
Writing and Dictation	1.55	.30	.30	.30	.30	—
Drawing	Optional in all cases, and alternative with English, Geography, or Writing.					
Preparation (K)	3.0	6 to 9 C	0 to 9 C	9.0	9.0	9.0

A. Extra time taken from Latin owing to temporary peculiarity of form.
B. Thirty-five minutes per week to Ancient History.
C. Young or delicate boys have the scale reduced.
K. See note to Table I.

SIMILARITY OF THE MAIN FEATURES.

Time-tables Nos. 1, 2, 3, and 5 may be taken as good specimens of their respective class of schools; such variations as exist between them would be found to exist between all the returns that have come to hand; so, too, will their marked family resemblances: the former due to the idiosyncrasies of individual headmasters, the latter imposed by the range of subjects set for entrance scholarship or ordinary entrance examinations at the public schools.

PARTICULAR SUBJECTS.—CLASSICS.

The most notable feature in these time-tables is the extraordinary weight given in them to classics and mathematics. It would seem that to these subjects alone is awarded sufficient time for the boys to be thoroughly grounded. Table I. shows sixteen hours per week devoted to classics alone exclusive of time allotted to that subject in preparation. Exact details of the amount so allotted are wanting, but in this and in all similar cases it may be assumed that the proportion of preparation given to classics and mathematics is a large one. From this time-table, too, it is evident that classical rather than mathematical distinction is coveted in this particular school. An example could equally

well be found where the converse was true, although in no case are the maximum hours awarded to mathematics so great as in the case of classics. Nineteen and a-half hours per week is the maximum return in any case for classics, and twelve hours is the maximum, of course in another school, for mathematics, exclusive of preparation.

AGE OF BEGINNING LATIN AND GREEK.

A well-marked rule will be found illustrated in Table No. 5. It appears to be the practice to begin the teaching of Latin to boys as soon as they can read and write English with some facility. They usually reach this stage by the age of nine—the age at which they generally enter a preparatory school. On entry, they at first devote somewhat less time than the rest of the school to Latin, but the hours are gradually increased as they go up the school until the point is reached at which Greek is begun, when the restrictions of the time-tables require some reduction to be made in favour of the new subject. Thus on Table No. 5 a boy of nine gives seven hours a week to Latin. A year later rather more than nine hours. A year later he has returned to seven hours for Latin, and in addition now devotes four hours to Greek. At that stage the proportion between the two would remain constant unless he passed into the Scholarship form at the head of the school, when more time would be necessarily devoted to Greek to enable him to acquire the vocabulary required for the difficult “sight” translations that are commonly set.

Greek is sometimes not commenced before the age of twelve. But this practice, affording as it does opportunity to devote attention to some of the least noticed but highly important subjects of the time-table, is practically impossible for schools that compete for scholarships; for them, the standard of Greek required for scholarships is so high as to compel its inclusion in the curriculum generally at the age of eleven years, sometimes still earlier.

MATHEMATICS.

Exact statistics of the age at which the teaching of Algebra and Euclid is begun, and of the times devoted to those subjects, are not deducible from the returns to hand. So far as they go they tend to show that the arrangement of Table No. 5 is approximately representative. It is the usual practice to entirely re-classify the school for mathematics; 25·8 per cent. of the schools, however, have not yet done so.

SCRIPTURE.

An element of doubt exists in the returns for this subject, in that it is not always distinctly stated whether the time given as being spent on the study of Scripture is or is not inclusive of instruction given on Sundays. It is certain, however, that in the case of schools with day-boys this cannot be the case. Their returns, though in no case so high as that on Table No. 2 (in the latter case the school consists exclusively of boarders), justify one in believing that the average given in Table No. 4 will not be found greatly to exaggerate the amount of time so spent during the week, and exclusive of all Sunday work. Although the weight given in entrance examinations to Scripture knowledge often approaches vanishing point, it is noteworthy that in no case is it omitted from the time-table, and that more time is assigned to it than to English language, history, geography, drawing, or dictation. Although there would be far from general agreement with the system described below, the general feeling of the profession as to the importance of the subject seems to be truly expressed by a headmaster of a large mixed day and boarding school who notes on his return: "The week's work closes with a short service instead of the last lesson on Friday afternoon. At this service are given short addresses especially suited to the boys. And here I may perhaps touch on a point that has caused much platform controversy, but has presented little difficulty to those who have the practical work of education in their hands—I mean the religious question. We have here boys of all denominations—Churchmen, Nonconformists, Greeks, and others. Our invited preachers on Friday have been equally heterogeneous—Ritualistic, Evangelical, Nonconformist, Presbyterian, and so on. We have had no suspicion of proselytizing or discord in their remarks—the religious difficulty has not 'cropped' up. The boys sing the same hymns and use the same prayers without a thought of divisions. I mention this, as the school chapel is the centre of public school life, and I believe that boys so regard it—vaguely perhaps while they are still at school, but vividly afterwards when school life is a memory. We have no chapel here; but the weekly service in hall is by no means the least among the things that make us feel that we, being many, are one body."

ENGLISH LANGUAGE AND GRAMMAR, GEOGRAPHY, HISTORY,
DICTATION.

One cannot help feeling that the time allotted to these subjects is altogether inadequate, particularly in the case of schools such as those that are exemplified on Table No. 1. Table No. 3 alone shows signs that English is seriously attempted; but in that school the extra time is found by the entire elimination of

Greek and the reduction of time assigned to Latin. Such a course is not possible in most preparatory schools; for by adopting it headmasters would preclude their boys not only from taking scholarships, but even from taking moderately good places on entrance to the public schools. Headmasters can only deplore the necessity of ignoring English subjects. The headmaster responsible for Table No. 1 notes at its foot: "I would gladly see more English* in my curriculum, but the standard of Latin, Greek, French, and Mathematics is so high in scholarship examinations that English is knocked on the head. We have no time for it. The public schools require none—practically." In so saying this headmaster but voices the general feeling of the profession. Another headmaster of a large boarding school intimately connected with a famous public school told the present writer that he should make no return in response to the present inquiry. "No," he said, "they would think I approved of the time we give to geography!" We are, indeed, practically unanimous in desiring to teach more of the English classics, more history, more geography; but our hands are tied by the public schools, as theirs are by the colleges of Oxford and Cambridge.

Under present conditions the best solution of the difficulty would appear to be to trust to a very sound grounding in geography, writing, and spelling, given in nurseries or kindergartens, and to use the small fraction of time that can be taken from the subjects at present insisted on by the public schools, for keeping up this knowledge, and supplementing it as far as may be by the study of the geography necessary to understand the political questions of the day.

FRENCH AND GERMAN.

French is taught in all schools, and there is great uniformity as to the time allotted to it. If it were possible always to ensure that all teachers of French were thoroughly acquainted with the language, the total result might be not unsatisfactory. This is, however, impossible. Unless a school is very heavily staffed—to a degree that is obviously much too expensive for all but the minority of schools—masters must be prepared to take classes in subjects other than the one or two they are specially qualified to teach, *unless* it is the practice in that school to keep the same boys together in one form for all subjects—a system that must either result in hopelessly retarding clever boys and outpacing slow ones, or in such subdivision of the forms into sections and units that class teaching is impossible. The returns show that 39·8 per cent. of the schools do not re-classify their boys in French.

The general result of our system is that French is not and

* The term English is generally used among us to include Language, Grammar, Geography, History, and Dictation.

cannot be taught as a living language. It is to be feared that the large majority of the teachers cannot speak it, at least with fluent accuracy. Boys learn to read it and to write it, they learn also a considerable number of grammatical irregularities, and so doing they satisfy all the requirements of the public schools. In the entrance scholarship examinations at the public schools, little or no value is attached to conversation or correct pronunciation, and until they do so it is hopeless to look for improvement in the method of teaching French.

German is not taught at all in 58·6 per cent. of the schools that have made returns. Experience shows that four languages, in addition to his own, are much more than can be learnt with advantage by any boy at one time. Therefore, it is only as an alternative to Greek, for boys intended for modern sides of schools or for Army classes, that German is taught. Further, some public schools prefer that in no case should boys start German before they come to them.

OBJECT LESSONS AND ELEMENTARY SCIENCE.

In 72·5 per cent. of the schools these are not attempted, and in only 16·3 per cent. are they taught to the top forms. Many masters regret their inability to find time for science in the regular time-table, and endeavour in some way to supply the want by organising lantern lectures during the winter terms. These are obviously to some extent fortuitous and cannot be tabulated; it may, however, be taken that, in the better schools at all events, their presence is sufficiently frequent to be of value. From the strictly utilitarian view of entrance examinations they are of little worth, and their presence is simply due to the unwillingness of preparatory school headmasters to allow their boys to grow up in entire ignorance of scientific subjects. At the same time it must be noted that one would hardly greet the inclusion of questions on elementary science in entrance examination papers with approval, since with boys of the tender age in question the teaching of this subject would almost certainly degenerate into cram. Besides, the time-table is overcrowded already.

DRAWING.

Drawing appears to form part of the regular curriculum in 65 per cent. of the returns, but in many cases it can hardly be seriously attempted. In several cases the time allotted is only half-an-hour per week, three-quarters of an hour and one hour are also frequent. In such cases the work must be of the most elementary or unsystematic character. Unless it is possible to give at least two hours per week to the subject, it would, in the present writer's opinion, be better to award to geography the tim-

now devoted to drawing. It is clearly a matter for regret that drawing is not universally a compulsory subject; undoubtedly the expense deters many schools from making it so. A good visiting teacher is expensive, and to engage a teacher solely or even chiefly for drawing would be more so. Second-rate teaching of drawing is probably more harmful than second-rate teaching in any other subject.

SINGING, INSTRUMENTAL MUSIC AND CARPENTRY.

It would be interesting and instructive to be able to tabulate the practice of the various schools in the matter of (1) singing and instrumental music; (2) carpentry and other handicraft. It has, however, unfortunately happened that the questions asked on these points were ambiguous, and it is very plain that all the replies are not framed on the same basis; they suffice, however, to show that in these subjects there is an entire lack of uniformity. Some schools teach all of them as part of the regular curriculum, others teach none of them at all. Some one school may be found that takes each of the above as a regular subject, and one, two, or three of the others as optional. Some teach them all the year round, others only during special terms. As a rule, it will be more general for singing to form part of the regular curriculum than for instrumental music or carpentry; this latter would seem indeed to be nearly always "optional." The time given to these subjects varies almost as greatly as does the practice of including or omitting them from the time-table. Probably about one hour per week is a fair average of the time given to singing in those schools where it is taught. In many cases two hours are given, and in one case three hours. On the other hand, half an hour is in several cases all that is allotted, and then one can only pity the teachers who are thus called upon to make bricks without straw.

Carpentry is usually not taught at all in the summer months. It is an employment that, if the workshops are conveniently placed, can be taken up at odd minutes. The boys regard it as an amusement, and during the winter, at times when they must be indoors, find vent for their energies in this direction. Hence an exact time-table does not exist. Probably about two hours of instruction per week is a fair average in cases where it is taught at all. In one case six hours is awarded, but this is altogether exceptional.

No credit whatever is given by the public schools to knowledge of these subjects. It is therefore necessary for them to be treated as supplementary to the regular time-table. The fact that they appear there at all is due solely to the importance attached to them by preparatory school headmasters and by the parents, who in many cases pay an extra fee for their sons' instruction in these matters.

DISTRIBUTION OF HOURS OF WORK THROUGH THE DAY.

Next in importance to the actual number of hours spent in work during the day is the manner in which those hours are distributed. It is obvious that all hours during the day have not the same value, and it is desirable, as far as possible, to subdivide the five or six hours of our boys' daily work in the manner which will cause the least strain on the nervous system. The subjoined tables have been drawn up to show at a glance the manner in which this problem is actually dealt with.

DISTRIBUTION OF WORK DURING THE DAY.

Time spent at work before breakfast :—

		Hours				
		0	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1
Percentage of schools	working as above	32	10.6	26.5	20	10.6

Time spent at work between breakfast and dinner :—

		Hours						
		$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	4
Percentage of schools	working as above	4	4	6.6	40	20	17.3	8

Time spent at work between dinner and tea :—

		Hours						
		1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$
Percentage of schools	working as above	1.3	4	1.3	34.6	4	44	5.3

Time spent at work between tea and bed :—

		Hours							
		0	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
Percentage of schools	working as above	4	4	2.6	41.3	17.3	18.6	4	8

It must here be noted that boarding schools, pure and simple, and those which take day boys as well, are not equally placed in this respect. In the former case the headmaster has an absolutely free hand as to the way in which he will divide his school day. All the boys are under his own roof and his playing-fields almost invariably adjoin the school-house. If it seemed good to him there is no reason—for example during such fiery heat as we had

the summer of 1899—to prevent his arranging for all violent exercise being taken before the sun had attained its power or during the late afternoon and evening. In the winter he always can and often does so arrange that a considerable part of the day's lessons are done after sundown, from 4 or 4.30 to 6 or 6.30, and also again in the evening. In the day school such arrangements are generally impossible, and this from two causes. Day schools are for obvious reasons generally situated in the vicinity of large towns, and owing to the consequent high value of land are often compelled to go considerable distances to their playing-fields. In North London, at all events, it is no unusual thing for schools to journey five or seven miles to their cricket fields; and, in addition, some are only able to lease them for particular times and certain days. Unsatisfactory as this state of affairs is there is unfortunately no remedy, for owing to all the land in such neighbourhoods being let on building lease and worth thousands of pounds per acre, no day school can buy sufficient ground for playing-fields without incurring a capital expenditure that must involve the ruin of the school as a paying concern. Hence it follows that their games, whatever the weather, must take place always at the prearranged time. The second cause that hinders flexibility of the time-table is the fact that the convenience of the parents of day boys has to be studied in the matter of the time of meals taken at home. Probably parents will, in the first case, make new arrangements to suit the school time-table willingly enough; but change and uncertainty upset their domestic organisation and are to them intolerable. No doubt this difficulty varies in detail in different localities, but in one form or another it is continually present to hamper headmasters and to restrain them from making arrangements, which, if possible, they would adopt. It operates to prevent them on whole school days from using in summer the cooler parts of the day for cricket, and in winter from doing ordinary school between 4 and 6 p.m., and using the early afternoon hours for football, a practice that is very general in boarding schools.

LENGTH OF SCHOOL PERIODS.

Another important factor to be considered in estimating the value of each time-table is the length of each school period. Among those who have replied to the question on this point in the present inquiry, opinion as to the proper length of time that a lesson should last varies between one hour and three-quarters of an hour, the latter view greatly predominating. In a few cases it is urged that one and a-half hours is not too long, provided the work is varied by taking during that period different parts of the same subject, and taking them in different ways. For example, in a Latin period the master may take grammar questions for a quarter of an hour, the boys standing up in form; then he may take composition for half an hour, the boys sitting

down; and the balance of the time may be devoted to translation of some Latin author. To those who have made experiment of the shortest period, this contention does not carry weight. It is certainly to be regretted that the three-quarter hour periods are not the universal rule. Approximately, however, 61 per cent. of the schools prefer three-quarter hour periods, 19 per cent. prefer one hour periods, 20 per cent. so qualify their opinions that classification is impossible. Even in the first two cases it must not be supposed that the decision for the shorter periods is always absolute. On the contrary, it must merely be taken as indicative of a preference. There are many schools that qualify their return to some extent by suggesting, for example, an hour or an hour and a-half for mathematics, one hour for Latin translation, or one hour and a-half for Latin verses. Some prefer a longer period for the senior boys; others suggest that shorter periods are desirable if a form is not subdivided into two divisions. In a few cases half an hour is the period generally preferred.

Indications exist that the feeling in favour of short periods is rapidly growing, and one is tempted to think that not a few of the headmasters who declare their allegiance to the longer periods must have serious doubts of the wisdom of so doing, from the very vehemence of their protestations to the contrary.

LENGTH OF SCHOOL PERIODS WITHOUT A BREAK FOR PLAY.

But however satisfactory it may be that an overwhelming proportion of preparatory schools have adopted the short period, this satisfaction is seriously modified by a consideration of the subjoined table.

Table showing the maximum time spent in class-rooms without a break for play:*

In	1.23	per cent. of schools that made return	3½	hours.
"	9.87	"	"	3
"	3.70	"	"	2½
"	37.03	"	"	2
"	3.07	"	"	1½
"	16.04	"	"	1½
"	13.58	"	"	1
"	1.23	"	"	55 minutes.
"	4.93	"	"	50
"	8.64	"	"	45

It is medically, psychologically and experimentally certain that it is impossible for boys to continue working even approxi-

* It should be observed that short "breaks" of two or three minutes are usually made between the lessons, even though this may not be shown on the time-tables, and though the time is not long enough for a game or necessarily spent in fresh air.

mately at their average standard of excellence through long continued hours of mental exertion. Experience shows that the best arrangement possible is to have periods of work seldom or never exceeding three-quarters of an hour, and at the end of each such period to allow a short interval of from five to ten minutes during which the boys are sent into the playground for play—not drill or organised games. This interval should be used to throw all class-room windows wide open, top and bottom, and so secure a thorough change of air in the class-room, a thing that cannot be done except in this way without exposing the boys to very dangerous draughts. Many headmasters explain that they allow two or three minutes at the end of each period for change of class, and even specify that they then allow the boys to talk. Such an arrangement in no way meets the necessity for which the interval for play is provided. The nerve tension which must result from the restraints of discipline and mental exertion can only be thoroughly relaxed by the fresh air and physical refreshment of independent play in the open. Still the fact that several headmasters who have not yet adopted the above system state in their notes that they think it ideal is a distinctly encouraging sign. One can only hope that they may soon be led to make trial of the system, being well assured that after a single term's experience of it nothing will induce them to revert to the old system.

PREPARATION.

Two very decided and opposite views are held in the profession on the subject of home-work or preparation. On the one part many masters state that with them there is no preparation by the boys without the assistance of the masters. On the other hand, it is strongly felt by others that it is desirable for the boys to gain experience in facing difficulties alone. These hold that in proportion as the quality of the instruction given in class improves, so there arises a tendency on the part of boys to consider it unreasonable for them to be expected to solve any but the very simplest problems. Directly the least difficulty arises they incline to think that it is the fault of the master, who has not sufficiently explained it to them. In this way they fail to acquire the power of working for themselves, and of attempting to grapple with a difficulty. Home-work is regarded by those who think thus as an invaluable antidote to this attitude of mind on the part of the boys, and they use it as the fifth step of a Herbartian five-step lesson. They regard it as of paramount importance that no help of any sort or kind should be given to the boys in their home-work. Of course they assume as an axiom that no lesson is set that has not been properly explained in class, or that is beyond the power of every boy to master, provided he has attended to the lesson and makes a reasonable effort.

CONCLUSION.

Two impressions are very clearly left on the writer's mind from a study of the returns that have been furnished to him. The first is the great willingness of preparatory school headmasters to adopt any change of the benefit of which they have been convinced. They are by no means blind to the faults that exist, and are indeed the first critics of the weak points in their own system. The chief point on which this is perhaps not quite true is in the matter of short periods of work and frequent intervals of play in the open air. But even in that connection it is only fair to say that the importance of this matter has only begun to be fully realised in quite recent years, and there are distinct signs that within a short period the reformed system will become universal. The second impression is the general regret that is expressed or implied by almost all headmasters at the enforced neglect of English subjects. The wish is not to abandon classics and mathematics as the principal medium of education, but rather to level up and to level down. We all acknowledge the many benefits that come from a sound training in the classics, but we think that at present their importance is exaggerated, and we would like to use time taken from these subjects, say three or four hours a week, to give a proper grounding in geography, embracing elementary science, and the literature and language of our own country. To the uninitiated it would appear that if they felt this nothing would be easier than for headmasters to make the change. This, however, is not the case. Preparatory schools are not solely educational establishments, they are also business concerns. Headmasters depend for their means of living on the profits of their schools. To make them pay they must please their parents, and parents will not be pleased unless their boys take satisfactory places at the public schools. If the headmaster's *clientèle* is among the class that desires scholarships for their boys, then that school must win scholarships or cease to exist. In any case, a school that fails to get its boys into fairly high forms on entering the public schools will, even with the highest athletic traditions and the greatest social prestige, stand at a serious disadvantage in the very keen competition that exists. To get scholarships at the public schools and to gain a high place on entrance there, a knowledge of classics and mathematics is indispensable. *Practically boys are placed by the authorities of the public schools on those two subjects alone.* Some public schools do give some weight to other subjects but it is not much. Practically, classics and mathematics are the only things that count. So long as this state of affairs continues there will be no considerable reform. It is evident that the hours devoted to study by preparatory schools are already quite as long as is consistent with the health and well-being of the boys—in some cases the hours are already

excessive. The only way in which the desired reform can be introduced is by lowering the standard in classics and mathematics. No doubt the public schools are in much the same difficulty as preparatory schools. Their curricula and time-tables must be based on the requirements of the Universities just as ours are on theirs. If the colleges of Oxford and Cambridge gave weight in scholarship and matriculation examinations to English and French, the change would immediately make itself felt, working downwards from the public to the preparatory schools. Till that is done there can be no important change, and in the meantime one can only say that, given the circumstances that at present exist, preparatory school time-tables are at least as satisfactory as we have any right to expect them to be.

H. FRAMPTON STALLARD.

THE PREPARATORY SCHOOL CURRICULUM.

The Preparatory School curriculum, in all its main features, is the direct outcome of the Entrance Scholarship system at the Public Schools. It is true, of course, that only a very small percentage of boys obtains Scholarships, and that for the rank and file the way into a Public School must lie through the ordinary entrance examination. But between the two examinations there is only a difference of degree. The standard in the scholarship examination is much higher, but the subjects in both are practically the same—Latin, Greek, French, Mathematics, with possibly (but by no means necessarily) questions in History, Geography, and Divinity. Accordingly, all boys in the Preparatory Schools are passed through the same kind of training. If they can reach the scholarship standard, well and good; a few—perhaps 8 per cent, on a liberal estimate—secure election; the rest get as near to the standard as they can, since the form in which they are to start at the Public School will depend on their knowledge of Latin and Greek as shown in the entrance examination.* The scholarship examination therefore includes that for entrance, as the greater includes the less, and its requirements are of decisive importance in shaping the work of the Preparatory School, for dull and for clever boys alike.

It is necessary to draw attention to this point at the outset, in order that it may be clearly understood how small is the power of initiative that lies with the Preparatory Schoolmaster himself in shaping his curriculum. His function is to prepare boys for the Public Schools; and admission to these is dependent on certain definite conditions. There is a very general feeling among Preparatory Schoolmasters that, in the light of modern knowledge and modern experience, those conditions are in important respects unwise; but they are powerless of themselves to alter them. Public opinion, meanwhile, as represented by the average parent, finds a ready test of efficiency in the scholarships a school is able to win. Nor is it surprising that parents should desire scholarships for their sons. They are intrinsically valuable, and to many people money is a serious consideration. But it is not only the poor or the mercenary parent that is attracted by them. Success in a public competition of this kind is gratifying evidence of a boy's ability. For intellectual fathers and mothers, moreover, there is a peculiar attractiveness in the system which obtains at Eton and Winchester, of keeping the scholars together in a community of their own, where the intellect of the school is focussed, and interest in intellectual things is therefore likely to

* I must be understood to refer here and in what follows to the Classical side of Public Schools, in which the great majority of boys are trained. Some important schools have no properly organised Modern side; some German instead of Greek.

be keener. But even if there is no "college" for boys on the foundation, a scholarship is still worth having, for it ensures a good start at the Public School and the special attention of the masters—no slight advantages in a crowded world of 500 or 600 boys. For many reasons, therefore, scholarships are coveted. I need not here enter on the vexed question whether the system by which they are awarded is morally justifiable. But their influence on the Preparatory Schools is beyond dispute. Scholarships in all but a very few schools are now thrown open to general competition. If success is to be achieved, a narrow definite path must be followed. Thus, if from time to time complaints are heard from parents who are interested in educational reform and who recognise the shortcomings of the Preparatory curriculum as it stands, they count for little in the general acquiescence or indifference.

If we turn to the requirements of the Public Schools, we find that at most of them the boy who secures election is one who shows exceptional ability in one particular subject. In the great majority of cases this subject is Classics. Sometimes it is Mathematics, or (rarely) Modern Languages. It is true that the examination usually includes a paper (the so-called "General Paper") of questions on History, Geography, and Divinity. But English subjects exercise little or no influence on the final award. What the Public Schools (with the rarest possible exceptions) want is the specialised boy. This is frankly acknowledged by those who justify the present system. At the Headmasters' Conference in December, 1897, Dr. James (Rugby) said:—

The predominant reason for giving scholarships at Public Schools was the fact that they did wish to attract able boys to the schools. But then, again, there were two reasons for the wish, the first being that they naturally all of them wished to have interesting pupils to teach and pupils who would respond to the efforts of the teacher; and in the second place, there was the narrower reason, that headmasters wanted them to win scholarships at the University for their schools, and it was just there that specialising came in. The University did not recognise all-round equipment, neither did the colleges, and therefore, if schools were to succeed in the University examinations—and that surely, it would be taken for granted, was an honest ambition—it was clear they could not be content simply to send their all-round boys, but must send boys who would do specially well in certain particular subjects. . . . He could not think that specialisation even at the very earliest age was altogether in itself a bad thing.*

It would be easier to defend this point of view if all or even a large majority of Public School boys proceeded eventually to the Universities. The fact is that comparatively few do so. The vast majority on leaving school go straight into one of the professions or into business. Either therefore Dr. James and those who think with him really believe a strict training in Classics to be the best education for all boys, the best means of developing faculty, so important that it cannot well be begun too early, or they are ready to subordinate the needs of the great majority to those of the clever few who are to win honours at the Universities for the schools that have educated them. It is,

* Report of the Conference of Headmasters, 1897, pp. 29, 31.

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school, well known for its success in winning scholarships, divides the weekly time-table, including preparation, of its highest form (average age, 12·8), as follows :—

Classics -	-	-	-	-	-	25	hours.
Mathematics -	-	-	-	-	-	6	"
English	{	History				3	"
		Geography					
		Maps					
French -	-	-	-	-	-	2	"
Divinity -	-	-	-	-	-	2	"

Classics, it will be observed, here claim almost twice as many hours per week as all the other subjects put together. This time-table is, of course, exceptional. The following one, the figures of which also include Preparation, more nearly reflects the ordinary practice.

TIME-TABLE of a Preparatory School (Summer Term, 1899) showing the hours devoted to each subject, inclusive of preparation for it, per week. N.B.—No preparation is done except under the supervision of masters.

	I.	II.	III.	IV.	V.
Average Age 9·8	11	11·2	12·6	12·7	
Religious knowledge - - -	1½	1½	1½	1½	1½
English, including Grammar, Language, and Literature.	6½	4	1	½	½
French - - - - -	4	4	4	4	4
Latin - - - - -	8½	12½	9½	10½	11
Greek or German - - -	-	-	5	5	6½
History {English - - -	1½	2	1½	1½	1½
			1	1	1
Geography - - - - -	1½	1	1	1	1
Arithmetic - - - - -	6	5	4	3½	2½
Algebra - - - - -	-	-	-	2	2
Geometry - - - - -	-	2	3	2	2
Writing and Dictation - -	1½	1	1	½	½
Drawing - - - - -	1	(in other classes optional)			
Headmaster's weekly review	½	½	½	½	-
Total per week - - -	32½	33½	33½	33½	34

	I.	II.
Singing (two divisions) - - -	1	1
Drilling and Gymnastics (two divisions) -	1½	1½

OPTIONAL SUBJECTS.

Drawing (two divisions) - - -	1½	3
Instrumental Music (including practice) -	3	3
Carpentering - - - - -	1	1
Fencing or Boxing - - - - -	1	1

Here the time, including preparation, devoted to the classics is seen to be $17\frac{1}{2}$ hours per week in the highest form—just half the total number of hours spent in school; and a comparison with Mr. Stallard's Table IV. on p. 48 will show that this corresponds very fairly to the average time given in Preparatory Schools to the subject. The main purpose of the curriculum, it is seen, is to teach Latin and Greek, as much time being devoted to subjects other than these as the conditions will allow.

The first thing that strikes one in this curriculum is at once its narrowness and the large number of subjects it comprises. It is, in fact, "the grand old fortifying classical curriculum," holding its ground with all the old tenacity, only that, under the pressure of public opinion, room has been found as well for the subjects now everywhere regarded as necessary ingredients in the education of cultivated people, such as French, Mathematics, History, and Geography, and perhaps also for those which are beginning to be recognised as valuable, such as Drawing. New subjects have been one after the other tacked on to the old classical system, as Dr. Welldon (late Headmaster of Harrow School) has said, "like an old coat let out to suit a growing child." The consequences of such a combination of the old and the new are what might be imagined. The clever boy climbs rapidly up the school by the classical ladder. An entrance scholarship is waiting to be won, and he has every temptation to drop, one after the other, all subjects which will not pay in the examination; thus his grounding is apt to be narrow, and his interest in everything except the world of books is stunted and impoverished. At $13\frac{1}{2}$ he will show a precocious facility in finding his way through an "Unseen," or in writing a piece of Latin prose; but (unless he happens to come from an unusually cultivated home) his knowledge of the world in which he lives, indeed of nearly everything outside the classics, will be very small. And he will certainly suffer from the special weakness inherent in an exclusively bookish training, viz., want of originality, want of power to look at things with his own eyes instead of through the eyes of his "authorities." He has come to the top, as the clever boy always does, to the curriculum what it may, and he is certainly, in a sense, a success; but what of the great majority, the boys of moderate or less than average ability? It cannot be urged too strongly that for them the present curriculum is a most serious mistake. This was the view expressed in 1897 by the Committee of the Association of Headmasters of Preparatory Schools. In a statement prepared for the Headmasters' (Public Schools) Conference, at the request of the Sub-Committee of that body, they urged that "the great dangers of the present system are (1) Multiplicity of subjects, especially of languages; (2) Specialisation at too early an age"; and continued as follows:—

It is too much to require of the average boy that he shall be learning at the same time, in the Preparatory School stage, four languages (Latin,

Greek, French, English), as well as Arithmetic, Algebra, Euclid, History, Geography, Divinity, and in some cases elementary Science and German as well. The consequence of his doing so is what might be expected. He cannot properly assimilate what he learns; he loses interest and keenness; he does not therefore love but often positively dislikes his work, and does it in a perfunctory way. One result of all this is the want of thoroughness and good grounding which is patent.

This difficulty in covering all the necessary ground has its effect, so far as general experience goes, upon most masters as well as boys. They not only have a sense of distress caused by the present pressure, but are also led to do a great deal more for their boys than is good for them. In order to save time, they are tempted to feed them with information instead of educating them. And thus, by their very willingness and devotion, they often weaken the spring of the mind, and destroy the power of doing original or unaided work.

And further, the time required for the teaching of so many subjects is almost certain to lead to one or two alternatives, either of which is highly undesirable, viz., either the omission of some of the subjects which ought to be taught, or a lengthening of the hours of work in school.*

And again:—

The hardworking boy of fair ability, who perhaps gets a scholarship under the present system, shows the bad effects of his training more clearly (sc., than the clever boy). He wins success for the most part by sheer effort of (verbal) memory. The strain of preparation cannot be kept up. The boy's brain revenges itself by lying fallow; and the Public School wonders how the examiners could have elected so dull a boy.

The ordinary dull boy suffers most of all. He has little aptitude for languages. The endless Latin and Greek and French and Mathematics (the latter yet another method of discipline in accuracy) are to him intolerably wearisome. Hence he hates schoolwork as drudgery. His curiosity (probably the one link with cultivation that he possesses) is left dormant. There is a divorce between his work and his life. And so, when he reaches his Public School, he seems to have learnt very little of anything, and does not know what to do with his leisure. Hence the excessive athleticism we most of us deplore, and the educational failures that are so common.

These words give, I think, a perfectly faithful picture of existing practice and its results upon the schools. "Learning by heart," it has been said, "is the great intellectual vice of boys." A system which involves the learning of so many languages at the same time, sets an altogether disproportionate value upon mere memory work, and correspondingly fails to develop intelligence. Latin and Greek are good seed, but they require appropriate soil, if they are to grow to profit. For the mass of young boys the soil is not ready. Latin and Greek together exhaust the ground, and results are admittedly very poor. Then, again, such a system has little time to give to subjects in which boys take a natural interest. Latin, Greek, French, and Mathematics, it is pointed out in the statement from which I have just quoted, are all "methods of discipline in

* The former alternative is, I believe, generally adopted. In these days, when the risks of over-pressure are so widely acknowledged, the Preparatory schoolmaster cannot afford to neglect the health of his boys. Certainly, if boys are ever worked out of school, the victims will be scholarship candidates, and such extra hours will be devoted to classics and mathematics, not to subjects "which ought to be taught," but which would not pay in the examination.

accuracy." But discipline, though of immense importance, is not everything in early education. The best teaching is that which takes the will captive and enlists the pupil as an ally in the process of learning; which sympathises with the curiosity natural to all children, and knows how to transmute it into sound and reasoned knowledge; which stimulates imagination and arouses interest, effort, the desire to know more. In a word, stimulus is needed as well as discipline. The average boy, who spends nearly his whole schooltime in wrestling with the rudiments of three foreign languages or with the dry rules of Mathematics, never sees the wood for the trees. He does not feel that growing and encouraging sense of power which comes from having his goal well in sight, pressing towards it, reaching it. What he needs is a richer curriculum—one that appeals to other than the merely linguistic faculties; one which, while not losing sight of discipline, shall at the same time appeal to other sides of boy-nature; discovering and developing aptitudes which now languish for want of opportunity; giving him less book-work, and teaching him how to use his eyes and hands; training memory less and intelligence more; in a word, making education a less mechanical and a more vital thing. It is "more life, and fuller, that we want." The teacher's aim, it has been admirably said, "is to help the pupil to live a fuller, a richer, a more interesting and a more useful life."*

But, it will be asked, if the Preparatory Schoolmasters are so dissatisfied with the curriculum as the vigorous language of the *Statement* implies, what remedies do they propose? What changes do they want in subjects or standards of work?

In answer to this, it must be admitted that they have not yet proposed any complete or adequate solution of the problem. Nor from a Committee like that of the Association of Headmasters of Preparatory Schools could such a solution be expected. The whole subject confessedly bristles with difficulties. It is one thing to be practically unanimous in condemning a state of things, quite another to be agreed as to the best method of reform. The classics are deeply rooted in our affections as well as in our school system. Moreover, a Committee is hardly justified in going beyond the mandate of the Association which it represents; and the Preparatory Schools Association at its annual Conferences, though anxious to stop the specialisation of young boys, has not unnaturally preferred compromise to any heroic methods, and has urged a lowering of standards rather than the excision of any of the traditional subjects. Hence in the *Statement* I have quoted from we find:—

It is impossible for us to formulate in detail what change in the curriculum should be made, because opinion is sharply divided as to this among ourselves. But the point to be emphasised is, that too much is now required, and that some change is imperatively demanded in the interest of the boys and of education generally. And we can at least express the hope that in an amended curriculum those subjects will be recognised as important which train a boy to use his eyes and hands,

* Sir Joshua Fitch, "Lectures on Teaching," p. 34.

and to interest himself in many things of which he now learns nothing from lack of time.

In a supplement to this *Statement*, which had been criticised as dealing too much in generalities, the Preparatory Schools Committee explained their position more fully. After pointing out that the Public Schools "demand from us a specialised rather than a soundly educated boy," and that "for the evil effects of the system we must look not to the clever boys who win scholarships, and under any system would come to the top, but to the rank and file, the vast majority of boys of average or less than average ability who are made to suffer," they proceed:—

What is the best remedy for this state of things? It may be doubted whether any remedy short of the excision of a language from the Preparatory School curriculum will be adequate to the mischief. For it is the effort to learn Latin and Greek and French at the same time, in the Preparatory School stage, that more than anything confuses and depresses and overburdens the average boy. But the remedy that we propose is of a less drastic kind. We desire that examinations should be wide rather than special; that papers should be set, and marked, in English History, Geography, Divinity, French, Latin, Greek, Arithmetic, Algebra, and Euclid, and that the aggregate of marks obtained should be the chief consideration in awarding the scholarships. It has been suggested that the Public Schools might have some difficulty, if these proposals were adopted, in selecting scholars of promise. We do not share this view. It will be easy to prevent the success of the mere smatterer by keeping the standard of each paper sufficiently high, or by fixing a minimum percentage which must be passed before marks begin to count.

We have not touched on entrance examinations, because we do not consider that the standard is so high as to prejudice the natural work of Preparatory Schools; but even here it would be easy to show that the preponderance of languages prejudicially affects the education of those boys, who, either for lack of linguistic ability, or because they go to a Public School at an unduly early age, cannot aspire to take a place above the lower half of the middle school. Such boys, under penalty of taking the very lowest place, must face papers in easy Greek translation, that is, they must learn Greek for at least three terms before leaving the Preparatory School.* This means either that for all boys Greek must be begun before sufficient advance is made in Latin, to say nothing of English, or that for these particular boys some important subject must be dropped that they may be specialised in Greek.

This reads very much as if the Committee would fain cut out Greek; but in the absence of any decisive mandate from the body they represent, hesitated to urge the adoption of so strong a remedy. The result is a proposal which is open to the criticism that, if adopted, it might indeed scotch Specialisation, but would

* This puts the facts very mildly. There must be many Preparatory Schoolmasters who will agree that the stupider (linguistically) the boy, the less can he afford to postpone beginning Greek till his last year at the Preparatory School. It would be truer to say of such a boy, that as the entrance examination draws nearer, everything for him must be subordinated to the absolute necessity of absorbing as much Latin and Greek as will carry him into the Public School. This means that the bright spots in his time-table—the drawing, the object-lessons—vanish, and he does extra Greek or extra Latin in the hope of rising to the required standard. If he scrapes in, he remains but a poor unintelligent smatterer, a thorn in the side of his form-master, doomed to early superannuation. *Cui bono?*

leave the other danger complained of—"Multiplicity of subjects, especially of languages"—quite untouched, if not actually intensified, by giving weight to subjects like History and Geography, which now are often excluded altogether, or, if not excluded, ignored. The same note of compromise is perceptible in the latest proposals of the Preparatory Schools Committee (June, 1899), viz., that Greek should be an optional subject in the ordinary entrance examination, but obligatory (Translation, Grammar, and Sentences) in the examination for Junior Scholarships.* I do not myself see how such a compromise can be expected to work satisfactorily. So long as a boy's position on entering the Public School is determined by his knowledge of both Greek and Latin, so long will he be pushed on in both languages as far as possible, and Greek will keep the hold it has now on the Preparatory School curriculum. There is, too, plausibility in the contention of many Public School Headmasters, that if there is to be a general lowering of standards all round, and papers of only moderate difficulty set in all subjects, the examiners will have no easy task to discover and elect the ablest boys. Surely it would be better to have fewer subjects, the indispensable subjects, and exact a high standard in these; in other words, cut out Greek (and, as I shall presently urge, Latin Verses), and let the scholar be elected on his Latin, French, Mathematics, and English subjects. The boy who distinguishes himself in Latin at 13½, would certainly distinguish himself in Greek (a far easier language) at eighteen.

It is sometimes urged that, unless Greek grammar be learnt while the memory is still young and strong, that is, in the Preparatory School stage, it will never be known with the thoroughness necessary to first-rate scholarship. But the statement is not worth serious consideration in the light of the classical achievements of men who have begun Greek late, and also of the many women who now learn Greek, but do not begin it till the age of fifteen or sixteen. And there is another thing to be remembered. We learn Greek, not with a view to becoming grammatical specialists, but to make acquaintance at first-hand with the great sources of art and letters, and, if possible, to assimilate something of the Greek spirit in our lives. It is notorious that the system of beginning Greek with boys while they are still struggling with the elements of other foreign languages fails, in the vast majority of cases, to make any real impression whatever on the learner. Most boys, even at the Public Schools, never get to the point at which it is possible to appreciate the literary quality of either Greek or Latin. For nothing can give this power of appreciation except wide reading; and wide reading is only possible to those who can read quickly and easily. But give a boy the discipline of Latin, train him to understand the difference between good and bad in literature by reading English masterpieces, and he will be ready, when the right time comes, to take an intelligent interest in Plato and

* See Appendix A.

Sophocles. I heartily agree with those who maintain that there is no single reform which would do so much to strengthen not only the Preparatory School curriculum, but the cause of classical scholarship in education generally, as the postponement of Greek till the Public School is reached.*

The position of Latin in the Preparatory stage is unassailable. Its complete system of inflections, its strict logical arrangement, make it an admirable discipline in memory and accuracy; it cultivates in the pupil that power of facing and tackling difficulties which is as essential in mental as in moral strength. The only question is: at what stage in the curriculum is it best to begin Latin? Is it not too difficult for quite young children? In Preparatory Schools, with hardly an exception, Latin is begun as soon as a boy is able to read and write English tolerably; that is, at eight or nine years of age. It is open to question whether this is not too soon; whether better results would not be got by making French the only foreign language to be learnt during the first three years at school, from nine to twelve, and then beginning Latin, devoting a large number of hours to it per week, pouring it in *à grandes doses* for the next two years (till fourteen), when a third language, Greek, may be safely embarked on. This method is based on the principle that for rapid progress in language-learning, the "intensive" method, one at a time, will give the best results. It is that of the so-called *Frankfurter Lehrplan*,† now on its trial in Germany; and the report of the nine years experiment, which will be completed in 1901, will be anxiously awaited by all who are interested in Preparatory School education. But, for the present at any rate, such a change of method would be hardly possible in English schools. If French is to be an efficient substitute for Latin as a means of training faculty, we must have a supply of teachers properly trained to teach it, that is, able to speak it themselves, and to make it a real discipline in precise and lucid expression. Such teachers are not at present to be had in anything like sufficient numbers. The Preparatory Schoolmaster is, with rare exceptions, a product of the traditional methods in education, quite unable, if he can teach French at all, to teach it otherwise than as he teaches the classical languages, through the grammar and the reading book.

Granted, however, that translation from Latin authors and the writing of Latin prose make an admirable discipline for the mind, can the same be said of the writing of Latin verses? Surely not in the Preparatory stage. By all means let a boy, who is ready to read Virgil or Ovid, be taught how to scan elegiac verse; this will certainly help him in translating and possibly in appreciating his author. But to do more in the Preparatory School is a serious mistake. The time required to

* For the opinions of Headmasters of Public Schools on the question of the teaching of Greek as far back as 1887, see Appendix B.

† See Special Reports on Educational Subjects, vol. iii., pp. 461, ff.

bring a boy up to the point of producing a respectable Latin version of an English poem is enormous, and when produced, what is the value of it as a training? In the great majority of cases verses are either stolen from a *Gradus*, or pieced together out of the tags that long practice has taught the boy how to use. In other words, they are no test of originality, but only of ingenuity and a well-drilled memory. It must be a common experience of Public Schoolmasters to find that a boy who has produced a surprisingly good set of verses in his scholarship examination, is quite devoid of the taste, the imaginativeness, which his performance had seemed to imply. What indeed can be more unpractical than the attempt to train the imagination of the young through so cumbrous a medium? Steep a boy in English poetry; let him drink deep draughts of Scott, or Tennyson, or Shakespeare, according to his age and growing powers of appreciation; let him, if you will, write English verses of his own in the manner of his favourite author of the moment; but to ask boys of thirteen to express themselves poetically in Latin is to set the pyramid on its apex. At this stage Latin verses are a purely artificial product, while they impose a most heavy burden on the curriculum.*

The whole question, indeed, of the teaching of English requires more care and attention than it receives. It is a common complaint in our schools that it is impossible, as things now are, to give sufficient time to English. And yet, when we think of the ceaseless flow of modern literature, much of it tempting, most of it poor and ephemeral, it is clear that children need training if they are to tell good from bad. Moreover, it is notorious how inarticulate our boys are, how weak in the art of expressing themselves on paper. Good reading, clear writing, some acquaintance with the masterpieces of English literature—these are subjects that ought to be taught systematically in the Preparatory stage, as parts of the regular school work. It is sometimes urged that the practice of Greek and Latin composition and translation is the best means of teaching English. But to young boys English cannot be thus taught. For those who are older and have made some progress in Classics, we may admit that to think out the meaning of an English sentence in Latin or Greek, or *vice versa*, is a good exercise in the living as well as in the dead language. But in the Preparatory School stage it is not so. Little boys are too anxious to make out "the sense," to think much of the right English idiom; masters are too anxious to make sure that the boys really see the construction and are not taking a shot at "the sense," to allow a loose translation to pass, which is good as English, but may simply cover ignorance of how the meaning was to be got at. The result is, that little boys do not and cannot learn English through the classical medium; on the contrary, naturalness of expression tends to

* Some important schools are, I am glad to know, discouraging this form of specialisation. Marlborough and Shrewsbury, *e.g.*, set no Latin verse paper to boys under fourteen this year (1900).

disappear under the literalism that is exacted from them in the interests of discipline; they are led insensibly to use Latin constructions—ablative absolutes and the like—in their English compositions, instead of the loose co-ordinate sentences that are so characteristic of English. Nothing will save them from this except constant reading of good English authors, constant effort to express themselves, first orally and then on paper, in their mother tongue. The practice of translating French into English may be made helpful, because the idiom of the two languages is very similar; but Latin is too difficult, too alien from the spontaneity of English, to be anything but misleading here. No indirect methods, however, can be of themselves sufficient. English is best taught through English as an independent subject; and three or four hours a week would not be too much for it in a wisely arranged time-table.

Closely connected with the study of English come History and Geography. These are unjustly depreciated as a poor means of training the intelligence, and as lending themselves to cram. This latter charge may be true; the questions on small and unimportant details which so often disfigure a history paper give point to the objection. "*Il n'y a rien de plus méprisable qu'un fait,*" said the French philosopher; and we may admit that barren lists of dates and chief events are contemptible as a mental training. But the fault lies not in the subject, but in the man who can bring himself to teach History as a mass of facts to be "got up" for examination purposes. Young boys, at any rate, should never have the subject presented to them in this desiccated and unpalatable form. The important dates, the necessary links, should of course be given and carefully committed to memory. But for the right teaching of History at this stage, it is of the first importance to create an interest in the subject; and surely in the record of great deeds, dramatic situations, successes, failures, we have an educational instrument of the very finest kind. Nothing can be better for a boy than to grasp such situations for himself. Reason, imagination, the moral sense, are all quickened by the effort to realise and appreciate the story. Keenly to sympathise with the men and women of the past, is to have taken the first step towards the attainment of the truly historic mind, and of the best, because the most humanising, culture. So regarded, History becomes an indispensable study in the Preparatory stage. And a similar case may be made out for Geography, through which a boy first makes acquaintance with the world in which he lives. Both subjects, if not a discipline in the sense that Latin is, are capable of being made immensely stimulating and attractive in the hands of a good teacher; one who understands his business in dealing with boy-nature, and who is not afraid to leave the dusty beaten track of the text-book, and take a line of his own across country from one point of interest to another.

So far I have dealt mainly with the literary side of Preparatory School training—the study of language. There remains

for consideration the study of "things" as contrasted with "words"—the study of external nature, and the training of the eye and the hand in dealing with "things." How far is it wise or practicable to teach boys science in the Preparatory School? They will almost certainly be taught science of some kind at the Public School; what can we do to train them so that they may make the most of the teaching when it comes? My own experience leads me to value highly what is known as the object-lesson, provided that the teaching is well done. It answers to a natural curiosity in children about the wonderful world they live in, and that is a strong point in its favour; it is a very popular lesson. On the other hand, if the object-lesson is merely a lecture of a didactic kind, entailing long lists of strange new names and facts to be remembered, it loses nearly all its value as stimulus, and might just as well be another lesson in grammar. But given a capable teacher, who puts not a text-book, but the actual specimens into the hands of his class, and insists on their seeing things for themselves, it is a training in accurate observation. Those who are competent to speak tell us that science has observation of nature for its basis. As the indispensable first step, therefore, a training in observation claims a place in the Preparatory School time-table. Probably Botany is the best subject for our purpose, if for no other reason, because every boy can be easily supplied with specimens of the object with which the lesson deals. I can well believe, however, that lessons in Elementary Physics would be even more valuable than the object-lesson; such lessons, for instance, as those recommended by the Incorporated Association of Headmasters, involving measurements of length, area, volume, and mass. "They constitute," says the syllabus, "a course of practical arithmetic and geometry exercises, and give infinite opportunity for problems upon ordinary surroundings."* It is claimed by those who have worked this syllabus in elementary and other schools, that it is wonderfully successful in teaching observation, accuracy, and handiness, and in developing a logical habit of mind.† I cannot speak with any personal knowledge on the point, and the system is not, as far as I am aware, in use in any Preparatory School. But it would supply exactly the kind of intellectual interest which boys with a defective ear, and little turn for languages, need to save them from stagnation; while boys of a bookish, literary turn need it also, to save them from one-sidedness, and to give them that training in close observation and accuracy which language, the *à peu près* of style, cannot give. If time can be found for it by the postponement of Greek, and properly qualified teachers are forthcoming, I feel sure such a course of Elementary Physics would meet with cordial sympathy and encouragement in many a Preparatory School.

Meanwhile we can all insist upon Drawing. It is the simplest way of training hand and eye; it satisfies an instinct that

* Printed in Special Reports on Educational Subjects, vol. ii., p. 414.

† See Prof. Armstrong's article in Special Reports on Educational Subjects, vol. ii., pp. 389 ff.

is almost universal in children; and besides being a rich source of healthy pleasure, it is so obviously useful in every walk of life that it ought to be classed with the three R's as indispensable. An increasing number of Preparatory Schools is, I believe, recognising this fact, and giving Drawing a regular place in the time-table.

* * * * *

The conclusions, to which our survey of the curriculum and its results have led us, appear to be these. As it stands, it deals unwisely by the clever boys, and unfairly by the rest. As long as Preparatory School training is directed mainly to the effort to teach so many languages at once—one of them at least of supreme difficulty—so long shall we fail to give young boys anything but a one-sided and inadequate training; one-sided, because there is not sufficient time to deal fairly with subjects other than classical; and inadequate, because as long as there is so much ground to cover, teaching is certain to be superficial, and the classics themselves suffer in the attempt to reap a harvest at a time when we should still be sowing seed. To relieve the pressure caused by this superincumbent weight of languages, I have urged that (1) Greek, (2) Latin verses (except the rules of scansion) should be postponed until the Public School is reached. This would leave French and Latin as the only languages, other than the mother tongue, which boys under fourteen should attempt to learn.

In advocating this reform, I have given reasons for believing that it would not eventually lower the standard of scholarship in our Public Schools and Universities. It would simply mean that able boys would begin Greek when they were better qualified to profit by it, and that boys with no turn for languages would never touch Greek at all, nor bring discredit (as now too often happens) upon one of the noblest of studies. That the Preparatory Schools would benefit greatly by the change I have no doubt whatever. It would mean for one thing that there would then be a *uniform* curriculum for all boys in the Preparatory stage, whether they were intended for the Classical or for the Modern side of a Public School, or for the Royal Navy. It is not unusual now for boys to spend much precious time over Greek for the purposes of an Entrance Examination, only to drop it after a short experience of the Public School—surely a most wasteful and demoralising conclusion! Or take the case of a boy who waits till he is twelve or thirteen before making up his mind that he wants to enter the Navy; what a boon it would have been to him if he could have devoted to Mathematics or to Latin and English subjects the years he has wasted on Greek! Further, it would mean a *reasonable* curriculum—something richer and less bookish than we now possess, and therefore better suited to the minds of young children; full of stimulus as well as of discipline, and therefore fitted to encourage them with a growing sense of mental power; more liberal in its scope, and therefore making provision for varieties of aptitude. No country can afford to concentrate its whole efforts upon the clever boys; our aim

should be to develop every single unit, as far as is possible to him, into an intelligent and efficient member of the body politic. No one who is acquainted with the average English schoolboy can doubt that intellectually he is not a success. It is high time that our methods were revised. But it is not the English habit to proceed by revolutionary changes. And the change I have advocated has at any rate the merit of not being revolutionary. In no other way, as far as I can see, will it be possible to keep the best of our traditional system, and yet find room for something more in accordance with modern requirements.

But even if we suppose the Public Schools converted to this reform in the curriculum, our difficulties are by no means at an end. There will still remain the important question of the teachers and their qualifications for their work. At present we have a large supply of men ready to take masterships in Preparatory Schools, and able to turn their Public School and University education to account in teaching little boys on the traditional lines. But if we insist upon French being taught as a living language from the first, or make it a substitute for Latin as a means of training faculty in the very young; if we substitute "problems upon ordinary surroundings" for the memorising of Greek Grammar; we make demands upon the teachers of a very different kind from those they have hitherto had to meet. Three Grammars, Latin, Greek, and French, have now to be committed to memory in the Preparatory School, and a great deal of time must therefore be given by the master to hearing lessons learnt by heart. But there is not necessarily any connection between hearing lessons and training intelligence. To make reform really effective, not only must measures be taken to exclude the incompetent from the teaching profession, but the teachers themselves must be trained for their work. At first no doubt there will be difficulties in securing a sufficient number of competent teachers. But the demand will gradually create the supply, and the boys trained on the more liberal system will grow into the men we need.

Meanwhile, it must be borne in mind that nothing can be done to improve the Preparatory School curriculum as long as the Headmasters of Public Schools refuse to move. They will not move, it is to be feared, as long as they endorse the language of the Headmaster of Rugby, and encourage the specialisation of children, because "University authorities do not recognise all-round equipment." But no philosophy of education can be sound which is built upon the shifting sands of University opinion. Indeed, there are already signs of a reaction against specialisation; even at the Universities men are beginning to turn their backs upon the idol they have burnished so long.* Let the

* "They (the Public Schools) adopt specialisation, because they cannot otherwise—so at least they believe—secure scholarships for their deserving pupils. And thus gradually a new creed seems to have reached us from some unaccredited educational Mecca, that man lives by literature or

Headmasters do the same. It is from them that the initiative must come. Let them make it clear that they will countenance no specialisation in the Preparatory School, either in classics or mathematics or modern languages; and let them prove that they mean what they say by taking Greek and Latin verses out of our curriculum, in order that time may be found for a more liberal system in the precious early years of boys' education. It would be a first and most important step towards putting the intellectual side of Public School life on a level with that moral and physical training of which the nation is so justly proud.

G. GIDLEY ROBINSON.

APPENDIX A.

ASSOCIATION OF HEADMASTERS OF PREPARATORY SCHOOLS.

In response to an invitation from the Headmaster of Rugby to appoint a Sub-Committee to confer, on June 20, with a Sub-Committee of the Headmasters' Conference, on the four questions mentioned in our letter of March last, viz., (1) The Curriculum, (2) The Examinations for Entrance and Scholarships, (3) The Age of Entry to Public Schools, (4) The Health of Boys at Public and Preparatory Schools,—the Committee met on Tuesday, June 13, 1899, to choose the Sub-Committee, and give them "instructions."

Fifteen members out of the seventeen were present, and every "*instruction*" was carried unanimously.

These were :—To urge,—

That the Curriculum for young Boys should be based on the following principles :—

1. *a.* It should be wide rather than special, and should aim at developing all faculties in due proportion.
- b.* The course of education should be adapted to the average, rather than to the exceptional, Boy.
2. (*a.*) That the subjects we ask to have included in all Entrance Examinations are—
 - i. *Latin.* Translation, Grammar, Prose (connected piece and sentences). [Obligatory.]
 - ii. *French.* Translation, Grammar, Sentences. [Obligatory.]
 - iii. *Greek.* Translation, Grammar. [Optional.]
 - iv. *Mathematics.* Arithmetic [Obligatory], Algebra and Euclid [Optional].
 - v. *English.* Divinity, English History, Geography (Physical and Political). [Obligatory.]
 - vi. *Drawing.* [Optional.]

science alone, and that schools live by scholarships. . . . But it seems to me tolerably certain that we must ere long reconsider our methods, and, if the phrase may be pardoned, redistribute our bribes. The tendency is, I think, to give more weight to those parts of the examination which test general intelligence."—The Master of Trinity (Dr. Butler), Presidential Address to the Teachers' Guild, May, 1900.

- (b.) That the Entrance Scholarship Examinations should follow the lines of the Entrance Examination proposed above, *with the addition of Latin Verses and Greek Sentences.*
- (c.) That due credit be given to all these subjects, and all Scholarships awarded on the aggregate of marks obtained.

The Sub-Committee appointed were :—The Chairman, REV. H. BULL ; Vice-Chairman, REV. DR. WILLIAMS ; Hon. Secretary, MR. COTTERILL ; MR. MANSFIELD, and MR. LYNAM.

APPENDIX B.

In June, 1887, the Headmasters' (Public Schools) Committee on the Teaching of Greek arrived at the following conclusions :—

That while it is not desirable to do anything to lower the position of Greek in Classical Schools,

(1) Boys who begin Greek before the age of eleven might, as a rule, have spent their time on other subjects without any loss to their Greek.

(2) It is desirable that all boys should have advanced beyond the elements of Latin before beginning the study of Greek.

The Committee desire further to express their opinion that in the examination for Entrance Scholarships at Public Schools it is not desirable that the examination in Greek should be such as to necessitate the very early study of Greek.

E. A. ABBOTT	} Committee of the Headmasters' Conference.
G. C. BELL	
W. A. FEARON	
W. HAIG-BROWN	
H. W. MOSS	
J. ROBERTSON	
J. E. C. WELLDON	
E. C. WICKHAM	
J. M. WILSON	

In the same year (July 25th, 1887) a letter was sent to Preparatory Schoolmasters signed by three of the same Committee, Mr. Bell (Marlborough), Dr. Fearon (Winchester), Mr. Welldon (Harrow), intimating that they proposed to act on the above Report. They wrote :—

"At present Masters of Preparatory Schools are frequently induced by the requirements of the Public Schools to start boys in Greek before either their knowledge of Latin or their mental growth has qualified them to enter on the study of a second dead language. Our experience shows that the minds of young boys are confused by the multiplicity of subjects taught at the same time ; and all the more, when they are taught Greek before they have acquired the power of reading an easy Latin author, and are still grappling with the rudiments of Latin Grammar.

"Boys who began at a later age would be able with more rapidity and less confusion to assimilate the grammar of a language which has many features in common with Latin.

"And there would be other considerable advantages in beginning Greek at a later age. Time would then be set free for the study of French, Geography, and the outlines of History ; and above all for gaining such acquaintance with English as would both stimulate interest and thought and promote a more intelligent study of Latin and Greek.

"We are persuaded that such a plan as is proposed would tend to diminish the number of boys who leave school at sixteen or seventeen with a confused and inaccurate knowledge of the Classical languages, and too ignorant of subjects which should form part of a liberal education.

"The Conference of Headmasters has already taken up the subject. . . . We should be prepared to go even further. While we fully recognise that the age test is rough and unscientific, and can only be provisionally accepted as a convenient mode of fixing a definite idea, we hold that the evidence which has been brought forward shows that Greek scholarship would sustain no loss, and in many cases would gain, if even boys with some gift for language did not begin Greek till twelve ; while in our opinion backward boys might profitably wait till later. To meet the needs of such boys we are prepared to make arrangements for teaching Greek in our own schools *ab initio*, and to admit boys on the classical side, up to a certain standard in the school, without a knowledge of Greek. We are most anxious to do nothing that will diminish the range and influence of classical education in England. But we believe that a change of method on the lines here indicated would lead to a higher average of intellectual attainment in Public Schools, and that, so far from injuring the cause of classical education, it would strengthen it by removing reasonable objections and by establishing the study of both Latin and Greek on a more scientific basis."

THE PLACE OF THE PREPARATORY SCHOOL FOR BOYS IN SECONDARY EDUCATION IN ENGLAND.

1. Of the foreign and American visitors who come in increasing numbers to study English education, it is probable that comparatively few have even heard of the existence of what we call Preparatory Schools. And yet the latter occupy an important place in the line of higher education in England. But so unsymmetrical are our educational arrangements, and so lacking in formal unity, that there are doubtless many Englishmen, not to speak of strangers from other countries, who would find it a little difficult to construct a diagram showing the various elements in our national education and the connection (if any) between the different parts which make up that varied whole. The aim of this volume in general is to furnish a description of the educational service rendered by the Preparatory Schools to the nation, and to explain the conditions under which their work is carried on; while the special object of the present paper is briefly to indicate the place now occupied by these schools in English Secondary Education, and to compare some features of their work with those of the corresponding parts of German education. As part of this task, therefore, I may be permitted to enter upon a short preliminary explanation of the circumstances which determine the special position of this type of English schools.

2. An English boy, whose parents can afford to give him a Public School education (to use those words in the English, not in the American, sense), usually begins what may be called regular lessons when he is about six years old. If his parents live in the country he generally has a governess; but, if they live in a town, it is a not uncommon arrangement for them to send him, when he has reached the age of six or thereabouts, to the Kindergarten attached to a girls' Secondary School, or to a class for little children taught by some lady with a special gift for that kind of instruction. In recent years there has been a great increase of interest in the education of young children, and some of the classes, referred to in the preceding sentence, are doing very interesting and original work. When he is nine and a-half, or ten, years old (or perhaps a little later), the boy is generally sent away from home to a Preparatory Boarding School, usually in the country, often at the seaside or in other bracing air.* He stays at the Preparatory School until he is between 13 and 14, when he goes on to the Public School which has been

* On this point it is impossible to generalise, but there are some signs of a tendency to defer sending boys to a Boarding School away from home as long as possible.

chosen for him by his parents, or where he may have been elected to an entrance scholarship.* At the Public School he will remain (in the great majority of cases as a boarder) until he is 18 or nearly 19, when, if he is intended for university life, he will go on to Oxford or Cambridge. But he will leave the Public School at a rather earlier age if he enters the Army, and the same will be true generally (though by no means always) if he is destined for commercial life.

It is a little difficult to say exactly at what point in such a course of education, secondary, as distinct from primary, education begins. Much will depend on the circumstances of each individual case. But, ordinarily, as soon at any rate as he enters the Preparatory School (and in many cases earlier) the boy will have begun to learn certain classical subjects which are still the staples of English secondary, as distinguished from public elementary, education. And, what matters a good deal more than the subject matter of his school lessons, he will then, as a rule, have entered a certain scholastic atmosphere, and a rather clearly distinguished sphere of educational influences, which are characteristic of the tradition of our older type of secondary schools. It is on entering the preparatory school, therefore, that a boy usually begins his secondary education, and enters upon a course of training which, being planned to extend over the eight or nine following years, may fairly claim to be judged by nothing short of the outcome of the whole period for which it has been designed. A prolonged course of secondary education, though made up of a number of school years, each more or less separate in the matter of instruction, cannot be compared to one of those bookcases which are composed of separate shelves, each an independent unit and separately useful, though forming in the aggregate a single piece of furniture. The course of education is intended as a whole, and should be judged as a whole. Of such a prolonged course of educational treatment, that furnished by the preparatory school is only the opening stage. It is not a course of education complete in itself, though it is usually under different direction from that which follows it. It is only a fraction, rather more than a third and less than a half, of a lengthy course of training. Of a flight of nine or ten educational steps, the preparatory school represents the first three or four. No one ascends them who does not mean to go up further still.

The preparatory school course is thus an integral part of one of the main lines of English secondary education. There are, of course, in England other lines of secondary education for boys, not to speak of what is done for girls. But this particular line of preparatory school and public school has a distinct character of its own and has rendered, and is rendering, specially valued service to the national life. That being the case, it is singular that no attempt has previously been made to describe the work of the preparatory schools and to show in detail the course of

* Most preparatory schoolmasters are in favour of boys going on to the Public School at 13½ or thereabouts.

training through which an English boy generally passes during the first three or four years of his secondary education. A glance at the time-tables issued by the authority of Government for higher schools in Prussia,* or at the corresponding documents relating to similar schools in other continental States, will show that those years of work, which in England are passed in the preparatory school, are included elsewhere in the general curriculum of the secondary school. It is as if the plan of studies and time-table for Eton or Winchester were so printed as to comprise the outline of work and time-table for the preparatory schools as well. Thus, if we wish to compare the work done in an English and a German classical secondary school, we have ordinarily to strike off from the latter the work of at least the three lowest classes—each of those classes representing one year of school life. The contents of the present volume will enable educational students to compare for the first time this complete course of English secondary education with its continental counterpart.

3. But any such comparison, fruitful and interesting as it is, needs to be guarded by several qualifications, both as regards the outward form of the programme of studies, and still more as regards the inner life of the two sets of schools. We are perhaps inclined in England to exaggerate the uniformity of German schools of the same grade, but at any rate, however much one *Gymnasium* may really differ in actual working influence from another *Gymnasium* or one *Realschule* from another school conforming to the same type, there does exist the specific body of regulations with which each school, according to its type, has to comply. A *Realgymnasium* may not at its own will and pleasure borrow a fragment of the curriculum of an *Oberrealschule*, or indulge in whatever experiments of curriculum parents may demand or its director may please. In England there are no such limitations on the freedom of the headmaster or the governing body of an individual school. If the outcome of the multitudinous experiments, permitted by this state of freedom, had been carefully watched and recorded, many valuable lessons would have been set on record for our guidance; but as things are, we can say little more than that in descriptions of English secondary education generalisations are perilous, and that exceptions may often be more frequent than what is reputed to be the rule. Especially difficult is it to fix on any curriculum as being sufficiently normal and representative of a given type of school to serve as a standard for comparison with the curriculum authorised for the corresponding type of school abroad.

But the difficulty is far from ending here. In a German higher school, a boy is in one class for all subjects. In an English school of the corresponding grade, he is re-classified according to his attainments in different parts of the curriculum, and may be learning English and Latin with one set of boys, French with a second, and Mathematics with a third. Again, in a German higher school, a boy almost invariably spends one complete year in each successive class. In England, few schools

* See *Special Reports on Educational Subjects*, vol. iii., pp. 253 ff.
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of the corresponding grade agree in their form of internal organisation. Mr. Frampton Stallard, in his interesting paper on the *Time-table* in this volume, states that he cannot show in detail the average number of hours given to each subject in the classes (or "forms," to use the English word) intervening between the top and bottom of the preparatory schools whose returns he has examined, and the reason for his inability is that "no two schools have similar form organisations. In one case there are as many as twelve separate forms for boys between the ages of $9\frac{1}{2}$ and $12\frac{1}{2}$; on the other hand, there are often not more than two." It should be borne in mind that the number of boys in the school affects the complexity of the internal classification, and it is not the case that one individual boy would pass through twelve successive classes in three or four years. But the fact remains that there is very great variety in the internal organisation of our English secondary schools—a variety which makes it extremely difficult to institute exact comparisons between the standard reached in them and in the more or less corresponding part of the far more uniformly organised German schools.

Yet these discrepancies, serious as they are, lend themselves more easily to adjustment than do other and more deep-seated differences between English and German higher schools. The German boy, like the English, begins his regular lessons when he is six years old. At that age he often goes for three or four years to the public elementary school, or not unfrequently, in lieu of this, to a private school (usually said to be ineffective), or to the preparatory department (where one exists) attached to the public secondary school which it is intended that he should enter when he is old enough to do so. That time comes when he is nine or ten. This age therefore marks an epoch in the life of the German schoolboy as it does in that of his English contemporary.* But the German boy attends as a day scholar, whether he lives at home or (as necessarily happens when his parents reside in some place where there is no higher school) lodges with relations or friends. The English boy, as a rule, goes away from home and enters a boarding school. There are exceptions both ways, but the general practice in the two countries may be fairly contrasted as above. It does not fall within the scope of this paper to discuss the competing merits of day and boarding schools, or the age at which it is generally desirable that a boy should be set to work with boys alone, and cut off from the constant associations of family life. But the fact remains that, for the English boy who goes to a Preparatory School as a boarder, there is much less home life than there is for his German contemporary, who, at the same age, enters the class called "Sexta" in a Gymnasium. It should be

* A special difference between the life of an English and a German secondary school boy is that the latter works on (under ordinary circumstances) in one school through the whole period of his secondary education. The English boy, who goes first to a preparatory school and then to a public school, changes his surroundings, intimacies, teachers, way of life, and (often) place of residence at the age of $13\frac{1}{2}$ or 14, this great educational change coinciding (often most beneficially) with a physical one.

remembered, however, in this connexion, that a small boarding school can reproduce some of the more intimate relationships of home life.

In a boarding school it is natural that what is actually taught and learnt in the schoolroom should seem relatively much less important than is the case in a day school. In a day school the boys meet for lessons, with a fringe of games; in a boarding school they live together, and lessons are an episode—an important episode, of course, but not the cynosure. That is to say, the formula of “education” varies in different countries according to whether—in the particular grade of school under discussion—the prevailing type is the day or the boarding school. If the former, the intellectual ingredients gain in importance, sometimes to the detriment of physical well-being; if the latter, the physical and social ingredients are emphasised, sometimes to the serious lowering of the intellectual average. In English secondary schools, lessons seem to matter a great deal less than they do in Germany for the ruck of the parents and for the ruck of the boys. There are numerous exceptions of course, and it is quite likely that economic and other forces now in operation in the two countries will lessen the present contrast. But physical condition, vigour, and cheerfulness of character, a pleasant temperament, and skill in games, probably count a great deal more in an English schoolboy’s scale of virtues than they do in a German’s, while as a rule the latter pays much more serious attention to what he is set to learn. Nor is the relation between boy and master the same. The German secondary schoolmaster tends to become professorial in his interests and way of life, learned in his subject, and extraordinarily skilful in giving instruction in it. The English secondary schoolmaster, teaching in a school of the corresponding grade, is much more the personal friend of his pupils, much more in sympathy with their out-of-school interests, and, however keen a teacher, almost necessarily much less of a specialist in it because of the other claims on his energies, thought, and time.*

4. There are other distinctive marks of our English system of higher education in its present dominant form—a form which is hardly likely long to remain unchallenged, though it is evidently congenial to the temperament of those at present most closely concerned with it.

Opinions differ as to the degree in which social distinctions might be lessened or removed by requiring, at least for the first stage of their education, the children of all classes in society to attend the public elementary schools. It is unlikely that such a requirement could be enforced unless public sentiment were overwhelmingly in favour of it. But few will doubt that our boarding school system tends, far more than any day school

* It has been pointed out to me that one of the most salient differences between the work of an assistant master in a German secondary school and that of an assistant master in an English preparatory school is that the latter is, by the nature of his calling, cut off from the opportunity of teaching elder boys, while the former, though he may take at one time a low form, will generally, in the course of his educational career, get experience in a higher one also.

system can ever tend, to keep together in rather isolated communities boys drawn from the wealthier kind of homes, and in some measure to deprive such boys, especially under the conditions of modern city life, of the experience of mixing habitually on equal terms with other boys brought up in less easy circumstances, and thus of measuring themselves intellectually throughout their school course with those who have actually felt the spur of poverty. I am far from meaning that any such tendency as this completely realises itself. There are abundant exceptions which will occur to everyone. On the other hand it would be misleading to imply that fashion or social prejudice are the chief causes of the present practice. Careful sifting of comrades and protection against indiscriminate influences, especially during childhood, are regarded by English parents generally as an advantage for their sons as well as for their daughters. And in an English boarding school of the type referred to there are, and always have been, boys drawn from many kinds of homes. But, broadly speaking, our boarding school system, because it is so variously equipped and so numerous staffed, is necessarily an expensive system, and expense necessarily excludes many who amply deserve to receive the best of intellectual help.

Next, the very existence of a boarding school system tends to drain away personal interest from the day secondary schools. Many of the men who would naturally be the most active supervisors and helpers of the day secondary school in their neighbourhood, send their boys away to boarding schools, and thus are not necessarily or personally concerned with the efficiency of the school at their doors.

Again, when a boy goes off to a boarding school, he lives his whole life during term time in the intimate companionship of boys of his own age. He finds himself in a miniature world in which he has to stand on his own feet, to hold his own, to listen to the frankest criticism, and to find his proper place among plain-speaking contemporaries. For good and evil he is cut off from many of the conditions of home life, however much is done to reproduce some of those conditions at school by the devotion and sympathy of those in charge. If the boy is thus taken away from an undesirable home, or from an over-fussy one, or from a home where he is spoiled, or from one which is too bustling, exciting, or irregular, the gain is obvious. It is found in a large number of cases that the boy's health markedly improves under the more regular conditions of boarding school life. The cultivating and refining influences of home are sometimes weakened by a certain disregard of discipline. But in cases where that danger is avoided, the removal of a little boy from the closer associations of home life must be regarded as being, in the great majority of cases, a misfortune, alike to the boy himself and to his parents. Yet fathers and mothers generally feel that it is not fair to a boy to cut him off from those who are naturally his companions and friends. Few parents would think it best to stand out against the prevailing educational habit of their time. They may grumble, but they comply. Nor must it be forgotten that, in the rush of modern life, fathers, and even

mothers, have not always the leisure to do for and with their children all that would be naturally done in an ideal home life. And when school life and home life are each severally raised to a rather high point of intensity of interest, and each at once makes many claims upon the sympathies and strength of a growing boy, the double strain upon him is often too severe, and fatigues him beyond his powers.

Furthermore, it matters after all comparatively little how much actual knowledge a boy has stored up by the time he is 13 or 14, provided that he is physically well developed, well disciplined in character, and sensible in his judgment, and that he has been trained to observe accurately, to express himself clearly, to work steadily, to be plucky, self-effacing, and generous, and to tell the truth. But these qualities are difficult to test by examination, and fall for the most part outside the schedule of intellectual efficiency. No education can guarantee them, but they are more likely to be secured when education is regarded as a discipline affecting the whole of a boy's pursuits than when it is tacitly confined to the operations, chiefly intellectual, of a day school, where games and out-of-school interests are not closely intertwined with the other elements of school life.

Finally, it is characteristic of a boarding school system in a country where great stress is rightly laid on games, to be in danger of somewhat underrating the national importance of really interesting *all the boys*, and not only a limited number of specially gifted ones, in intellectual pursuits. The need for high intellectual efficiency in all professional and commercial callings is increasing year by year. To the present writer it seems urgently necessary for us to secure intellectual efficiency in an increased degree, without weakening that English tradition which regards other qualities as being the most essential elements in a noble character.

5. School lessons, it is true, are far from being the only matters of importance in school life. The traditions of the place, the effect of the personal example of others, the penetrating influences of community life, result in a certain corporate *ñthos* and common tone of mind, and are therefore more permanent in their results. But nevertheless what is taught and how it is taught do matter very seriously—far more seriously than is sometimes admitted or implied.* And therefore it may be useful to make a short comparison between the curriculum of one English preparatory school and that of the corresponding part of certain German schools which occupy the same sort of place in the national regard. But here again comparisons are difficult to make, partly because the length of the lessons varies—the German “*stunde*” being 50 minutes—partly because so much turns on that incalculable element, the amount and difficulty of “home lessons,” but chiefly

* A story is told of a parent who took great pains to find the best preparatory school for his boy. He had a paper of questions, ruled into columns, one for each school visited, and touching on nearly every point of importance as to climate, accommodation, diet, exercise, supervision, and games. But it had not occurred to him to prepare any questions, or to collect any information, on the subject of what was taught or how it was taught.

because no merely numerical rendering of the hours devoted to certain subjects can ever represent the varying intensity of different lessons according to the method and excellence of the teaching, any more than a compendious expression like "Latin" in a time-table can really tell us the true contents of the lesson represented by such a name, whether it is narrowly and pedantically "classical," or whether it really comprises a liberal discipline in the use of the mother tongue.

The following table makes no claim to have escaped these pitfalls. All that it can hope to do is to compare in a general sort of way the normal tendency of the curriculum of one English preparatory school with that of the corresponding part of the curriculum of the classical schools of Prussia and of Baden respectively, and of the Reform School at Frankfort, which is justly attracting the attention of persons interested in education all over Europe.

TABLE I.
WEEKLY COURSE OF STUDY FOR BOYS AGED FROM ABOUT 10 TO 11.

Subject.	An English Preparatory School competing for Entrance Scholarships at Public Schools.	Prussian Gymnasium.	Baden Gymnasium.	Reform Schule, Frankfort (also a Gymnasium).
Religious Knowledge - -	2	3	2	3
Mother Tongue (including Writing and Composition)	5	6	5	7
Latin - - - - -	6	8	9	0
Greek - - - - -	0	0	0	0
French - - - - -	2	0	0	6
History and Geography -	4	2	2	2
Mathematics - - -	4	4	4	5
Nature Study - - -	0	2	2	2
Drawing - - - - -	1	0	2	0
Total "Hours" - -	24	25	26	25

The English time-table is taken from Mr. Frampton Stallard's paper. It is that of an English Preparatory School which competes for Entrance Scholarships at Public Schools. Other schools have other time-tables, but it seems fair to take this as indicating the kind of curriculum through which many of the cleverer boys have to pass. The time-table of a school which does *not* compete for scholarships would show a different balance of studies.

The German Stunde is 50 minutes.

The English time-table excludes optional subjects (singing, instrumental music, and carpentering), as well as preparation and drilling and gymnastics.

The German time-tables exclude drilling and gymnastics, and singing and home lessons.

TABLE II.
WEEKLY COURSE OF STUDY FOR BOYS AGED BETWEEN 12 AND 13.

Subject.	An English Preparatory School which competes for Entrance Scholarships at Public Schools.	Prussian Gymnasium.	Baden Gymnasium.	Reform Schule, Frankfort [also a Gymnasium].
Religious Knowledge - -	1½	2	2	2
Mother Tongue (including Writing and Composition)	¾	3	2	4
Latin - - - - -	11	7	8	0
Greek - - - - -	5	0	0	0
French - - - - -	3	4	4	6
History and Geography -	2	4	4	5
Mathematics - - - -	6	4	3	5
Nature Study and Natural Science - - - - -	0	2	2	2
Drawing - - - - -	1	2	2	2
Total "Hours" - -	30½	28	27	26

The notes appended to Table I. apply here also.

A comparison of these two tables will show that, at the earlier point in the boy's career, there is comparatively little difference between the curriculum of the English preparatory school chosen for the purpose of this illustration (and it should be remembered that the curriculum selected is that of a school which competes for scholarships at public schools, and therefore reveals in an extreme form the tendency towards a somewhat narrow range of studies) and that of the corresponding schools in Prussia and in Baden. If anything, the balance of advantage seems to lie on the English side, except that the English school (as is too often the case) ignores nature study. I do not propose to institute here a detailed analysis of the comparative merits of the (rather revolutionary) curriculum of the Reform Schule, which puts off all classical teaching until the boy is 13 or thereabouts,* and of the older type of classical curriculum with which we are familiar in England and which is still paramount, though in some apparent peril, in Germany.

But if we turn to the curriculum for boys aged between 12 and 13, we see a very different state of things. Again, the

* i.e., he begins Latin in Untertertia (which class, as a rule, is entered by boys about their 13th birthday) and Greek in Untersekunda, which is entered two years later.

only reasonable comparison is between the older types of classical course. However strongly we may feel the wisdom of the Frankfort plan, and however much we may desire to see the day when Latin will be postponed till about 13 (and Greek two years later still) and the time so saved devoted to the study of French and to careful training in English composition, English literature, the elements of natural science, history and geography, drawing and manual exercises, so adjusted in a well balanced curriculum as to form a broad and stable basis for a liberal education, we must nevertheless regretfully admit that, so far as our most famous English schools are concerned, the day of that reform is still remotely distant. But even if we compare the English curriculum with the strictly classical curriculum of the Prussian Gymnasium of the old type, or with the corresponding course of study in Baden, how specialised is the English course, and how meagre in its provision of teaching in some of those subjects which would be likely to have a liberalising effect on the mind. The study of English, the reading of English literature, the writing of English composition, have shrunk to three-quarters of an hour a week. For French, there is only half an hour a day. For history and geography there is allowed only half as much time per week as the German curricula provide.

Nature study and natural science are still a blank.* Mathematics has mounted up to six hours a week; five hours a week is given to Greek. That is to say, a third foreign language (a second dead one) is set to the English boy at a time when even a full hour a week cannot be spared for the study of his own mother tongue. Latin has risen to eleven hours a week, or nearly twice as much as any other subject.

Now though it is true that, in the course of the Latin lessons, a skilful master never fails to impart very excellent and searching discipline in the exact use of the English rendering or in the accurate reproduction of the meaning of the English word in its Latin equivalent, nevertheless there are few among those interested in the welfare of our preparatory schools who do not at heart deplore the necessity of such a curriculum for boys of such intellectual quality and at such an age. "Necessity?" the stranger may ask; "why is it necessary to do it, if the preparatory schoolmaster himself disapproves?" The answer is that *the Preparatory School curriculum, as it draws to its close, is under the shadow of the Public School Entrance Scholarship and Entrance Examinations*. As Mr. Frampton Stallard points out, "to get scholarships at the public schools, and to gain a high place on entrance there, a knowledge of classics and mathematics is indispensable. Practically boys are

* It should not be forgotten that many of the English boys come from homes where natural history and country occupations are favourite pursuits; that during the holidays (fifteen or sixteen weeks in the year) many of them have special opportunities for carrying on their study of natural history; that there are often natural history societies in the schools; that in play-time many of the masters associate themselves with the boys in natural history pursuits; and that there are often lectures on natural history outside the regular curriculum. But there is very little systematic study of natural history or natural science in the bulk of these schools.

"placed" by the authorities of the public schools on these two subjects alone." Or to quote Mr. Gidley Robinson's able and temperately worded review of the situation, "the preparatory school curriculum in all its main features is the direct outcome of the entrance scholarship system at the public schools." In order to lessen the obstacles now impeding those changes in the curriculum, changes which are so inherently reasonable and so widely desired, it is doubtful whether anything will avail short of strong representations from the parents of the boys whose education is thus in some degree impaired. There is no reason in the nature of things why the public schools should not give marks in their examinations for a different and more extended range of subjects. And it is difficult to believe that Oxford and Cambridge would offer serious opposition to such a reform or fail to readjust in turn their entrance requirements in accordance with the altered curriculum of the public schools.

6. No one can visit an English preparatory school of the best modern type without feeling that no other country can show, among its schools for boys of the same age and sort, anything that can surpass in excellence and promise what we here are so fortunate as to possess. He would probably go further than this, and say that he had never seen, and never expected to see, in any other country, such a scene of happy school life or such thoughtful and affectionate care lavished on schoolboys, yet with due regard to order or discipline.

But while heartily admiring all that is now done to make these schools the centres of much that is best in educational influence, the present writer is far from thinking the course of studies ideal or well designed for the intellectual welfare of the boys. The last thing he would wish to do is to impute blame to the masters in charge of the preparatory schools. It is not their fault. In the last resort it is the fault of the parents, who ought to insist on a change, and who alone can bring a change about. The schools have picked material; they teach some of the brightest boys in England. Many of these boys are taught up to a very high point of proficiency in a rather narrow range of subjects. The quality of the work done in classics is specially remarkable; and it would be a grievous mistake to think that anything short of the very best teaching in other subjects could effectively take the place of what is now so well done in Latin or Greek. Many experienced and skilful schoolmasters are convinced that exact teaching in the classical languages is an unrivalled discipline for the mind—not in a directly utilitarian sense, but in its indirect effect on the logical powers. Many other people, while not prepared to concede the unique excellence of the older classical training, would cordially agree that, in skilful hands, the teaching is thorough, and that, in a certain limited sense, it severely disciplines the mind of the boys. But they feel that it often fails to induce a wide range of intellectual interests. It causes the boys to miss their one opportunity of learning many things far more appropriate than advanced classics to their natural tastes and years. With great respect to those eminent authorities who hold a contrary

90 *Place of the Preparatory School in Secondary Education.*

opinion, I would urge that the customary course of studies in our English preparatory schools is unduly neglectful of the mother tongue, of English composition and of English literature; that it is too heavily loaded with Latin; too soon encumbered with Greek; and that it fails to do what could and should be done in the teaching of French as a living language. It usually provides far too little drawing, brush work, and manual training generally. It might do more to interest boys in natural history and to train them in a scientific way of looking at things. Too often it fails to develop powers of expression or to stimulate and strengthen the imagination, or to widen the range of intellectual and social sympathies. It is prevented from doing all this, chiefly by the dead weight of habit and by the rules for the entrance examinations at the public schools. If in addition to all the noble work which the Preparatory and Public Schools do at present, they felt free to take the lead together in cautiously but extensively reforming their curriculum, the benefits conferred by them on the nation, already so great as to excite our admiration and gratitude, would be considerably increased.

M. E. SADLER.

ENTRANCE SCHOLARSHIPS AT PUBLIC SCHOOLS
AND THEIR INFLUENCE ON PREPARATORY
SCHOOLS.

It is hardly to be disputed that the astonishing improvement which is to be noticed in the Preparatory Schools of to-day compared with those of thirty years ago has affected especially the two departments of physical supervision and teaching. As regards the first, there is little doubt that the influence of the mothers of the boys has been steadily and successfully exercised in the direction of general improvement. It is only natural that at the tender age when a child first leaves home, the mother's voice should be a powerful one in the settlement of many questions bearing on food, accommodation, and so forth. But when we come to consider the teaching, a new question presents itself. Granted that the mass of parents have secured important changes in some departments, are we to attribute to them also the manifestly greater efforts now made on all sides to keep the teaching up to a high level? The difficulty in this idea is that the anxiety shown by the English upper classes in the mental training of their children cannot even yet be described as very wide or deep, and thirty years ago it was even less so. But if this is not the cause of the phenomenon, what is?

The answer to this question introduces one of the most interesting but least satisfactory parts of the subject.

During the last thirty or forty years the system of entrance scholarships has been enormously extended among the Public Schools. It was found that the large endowments of Eton and Winchester were attracting the very pick of the cleverest boys in the country, and since at that time public attention began to be more and more given to the financial side of education, it was natural that other schools which had risen in importance since the middle of the century should do their best to draw some supplies from the same source; that is, to hold out prospects of gratuitous or nearly gratuitous education to the clever sons of impecunious parents. The idea once formed spread very rapidly, and soon (that is, about 1885) every school of any prominence at all, and many grammar schools that could ill afford it, were offering substantial reductions to boys whose promise in classics and mathematics could be tested by an examination at twelve or thirteen years of age. Thus a rivalry was established, and from the figures quoted in the Report of the Royal Commission on Secondary Education, 1895 (Secondary Education, vol. i., p. 173) it is clear that the desire to outbid each other in the pursuit of clever boys has induced the governing bodies of the Public Schools to abandon all idea of restricting the money grant

to the eleemosynary purposes for which it was originally given, and to press forward in eager haste and add to their scholarships, so as to keep up the standard of cleverness in the new entries to the school.

The precise effect of this change on the Preparatory Schools it is very important to estimate. But before doing so it will be as well to point out the full meaning of the action of the governing bodies and of enterprising head masters who have urged them on. It is interesting to determine how this rise of scholarships has come about now, while in the middle of the century the peculiar pressure and difficulties connected with it were not felt. Two great influences have been at work: railways and the public Press. The time was, from 1850 to 1860, for example, when a school like Shrewsbury, owing to the fame of two or three great head masters, became a nursery of classical scholarship of a most remarkably advanced order. Critics might say that the scholarship was narrow in character, suited to the old classical Tripos at Cambridge, and alien from the wider curriculum of the Oxford Greats, and so forth. But no one could possibly deny the extraordinary enthusiasm for a certain kind of learning which existed there, and the ripe, sound scholarship which the school produced. In other words, the prestige of the Eton or Winchester scholarships was not so great as to absorb all the clever boys in the country. The insufficient railway accommodation no doubt prevented many parents in the north from sending their boys southwards, and tended to feed the local schools with scholars in their own county, or, anyhow, from not very remote districts. But when this insufficiency of railways gave way to rapid and easy communication from all parts of the kingdom, it was plain that the old local schools would have a hard fight with the big boarding schools; for the smaller grammar schools the fight has been, and still is, one for dear life. And even the large foundations, such as Marlborough, Repton, Haileybury, Clifton, Rossall, and others, though they continued to thrive in numbers, thought it necessary to institute or augment scholarships in order to prevent the absorption of all the rising talent by the other foundations. It is possible, however, that if left to themselves these schools would have shortly discovered that the large expenditure involved was likely to prove useless. But at this juncture the second great influence made itself felt—that of the public Press, or rather, to put it more accurately, the increased publicity which social changes have given to school life and doings.

At this point the Preparatory Schools have been drawn into the vortex. The rapid increase of the pressure of competition among all Private and Preparatory Schools, has made it seem advisable to the large majority to advertise their successes in the newspapers. Hence the scholarships gained in the Public School entrance examinations are duly recorded not only in the prospectuses of many Preparatory Schools, but in the newspapers at the time the result is made known. It is felt, whether rightly or wrongly it is hard to say, that the one thing fatal to a school

is obscurity and so the authorities do everything in their power to bring before the public the names and numbers of small boys who have passed a stiff but narrow examination, and have gained the reward of paying less for their education at the Public School.

There is something open and above board in the action of the Preparatory Schools, which is less noticeable in the orthodox behaviour of the authorities of the Public Schools. Their method of making similar successes known to the public is to publish them by the mouth of the head master on Speech Day, the proceedings of which are duly reported in the leading newspapers. In defence of this practice it may be urged that the friends of the school wish to know the honours that have been obtained, and further that the strong current of athletic interest, which sometimes threatens to bear all before it, needs to be counteracted by prominence being given to intellectual success, and that if the teaching in a school is good there is no reason why its fruits should not be pointed to on fitting occasions with legitimate pride. The worst of it is, however, that there is a serious unreality belonging to the whole matter, which is transparent enough to the few who know the truth, but very deceptive to those who do not. It consists simply in the fact that the examination successes of any particular school depend almost entirely on the quality of the boys sent thither. There are slight differences no doubt between the teaching and the traditions of scholarship belonging to one school rather than to another. But various influences are slowly but surely abolishing these differences and reducing the effective training of one school to the same level as that of another. Formerly there was a great difference in the comparative efforts of the leading schools in the matter of intellectual training. One school was famed for its great traditions and long history and its "yield" of notabilities in the past. Another was full of intellectual activity; and various methods of teaching Greek and Latin were practised here, but unknown there. Nowadays all this is changed. Everybody is urged forward to do their best; the same kind of men get the teaching of the best scholars in their hands, and what is done in one foundation is quickly known of and adopted at another. And yet the difference between different schools in the matter of scholastic "honours" is enormous, and if anything is increasing. What is the reason of this?

The head masters of the Public Schools are still of opinion that the amount of money offered in scholarships is the determining factor in the situation. They do not proclaim this on Speech Days, but they show it either by their continuing the scholarship grants or by increasing them. And *prima facie* it would seem that they are right. The schools with the longest annual record of successes are those which offer the largest and most numerous scholarships; it is clear that even if the peculiar advantages belonging to Day Schools in London, Birmingham, and Manchester be allowed due weight, the financial differences have a great deal to do with the result. And yet the efforts made by

the Governing Bodies of scores of schools are quite impotent to bring about the desired result. During the last ten years the congestion of clever boys in a few schools has been more noticeable than ever. This is one of those assertions the truth of which may be known to some, but yet is very difficult to set out in any formal way. There is strong reason, however, to believe that, in nearly all the schools outside of a select few a decline in classical scholarship has been going on during the last twenty years. If this be doubted, a good test would be to examine into the standard of the best boys in one or two schools which were fertile in classical scholars at that time. The result would be that an individual boy or two would be found up to the mark, but whereas there used to be ten or a dozen strong scholars there are now one or two, and the sixth form would be found to contain a large majority of mediocrities. And this has gone on in spite of a greatly improved system of teaching in the middle and lower parts of the school. The late Master of Balliol remarked that in his time a manifest improvement in the average knowledge of Greek possessed by Public School boys had taken place. And yet a school which thirty years ago constantly sent up boys to the University quite fit to take a first-class in the Cambridge Tripos at nineteen years old, now falls in numbers of scholars far short of the few eminent foundations which have been referred to. This result is not because money is not spent in scholarships, nor because the teaching is one whit inferior to what it was—as already stated, it is, if anything, better—but because some other influence has been at work and has caused the supply of clever boys to be unevenly distributed, and to form a conglomeration in three or four of the best known schools.

This influence is twofold. It is the rise of day schools, and the action of the head-masters of preparatory schools. The first is foreign to the subject of this paper and may be briefly dismissed. Great energy and good teaching have doubtless been expended on the pupils of the four great day schools of London, Birmingham, and Manchester; and it has been pointed out by an experienced master that, as compared with the members of boarding schools, day school boys possess an enormous advantage in the constant stimulus of ambitious parents at home. Added to these facts, the amount of the pecuniary attraction is, in one well-known case, enormous. Hence the inevitable result. Parents of sharp boys really eager for academical success find it worth their while to forego the advantages—which are generally recognised—of a boarding-school training, and secure the strong concentrated teaching and scholastic atmosphere of the prosperous day school; and as long as this is the case there will be nothing whatever surprising in the number of prize-winners turned out by St. Paul's, Merchant Taylor's, and Manchester Grammar School.

But what has now to be considered is the influence of the Preparatory School on this particular phenomenon, the absorption of the scholars into a few schools. One of the most obvious of the effects of the strenuous competition between

Preparatory Schools is the struggle to train boys of thirteen up to the standard required by the public school entrance scholarships. It is very generally felt, perhaps more strongly than facts warrant, that a preparatory school thrives to some extent in proportion to its intellectual successes as measured by these examinations; and so no stone is left unturned by the head masters to secure the reputation of being successful in the entrance scholarships. As to the effect of this on the general training of young boys much might be said; but its bearing on the present question is not hard to trace. Owing partly to financial outlay, partly to general prestige and ancient tradition, certain scholarships, such as those at Eton, Winchester, Rugby, and some day schools, are of higher repute than others. If a preparatory school can secure one of these it gains, so it is thought, in reputation. Hence, as soon as a boy of eleven years shows precocity in classics or mathematics, the master naturally does all he can to induce the parents to select for him one of these schools, and in many cases he is of course successful. He is the first "expert" perhaps who has given a decided opinion of the selection of a school, and as very frequently the parent has no very strong feeling, the arrangement is generally made as suggested. So it comes about that the cleverer a young boy is the more certain he is to go to a school which is already more than fully stocked.

What are the effects of this concentration of the intellectual promise of the country into a very few schools? There is something to be said in its favour. It is generally admitted that one sharp boy quickens the wits of another, and in an atmosphere of studiousness and nimble-tongued talk all the members of the community are benefited. It is possible to be quite convinced of this, and to be perfectly satisfied that when once it is conceded the whole question is set at rest. There are, however, other considerations which are only too easily forgotten. If the after-carriers of the picked clever boys of the public schools are noticed, it is found that worldly success is meted out to them in a measure apparently quite independent of the classical or mathematical ability which they showed in their teens. The numerous failures are those boys who grow up into men unable to work with others, wanting in broad understanding of their fellow-men, and in practical tact. Yet the system under which they have grown up has encouraged in them a belief that they are better equipped for the battle of life than their schoolfellows. This is an almost inevitable result of the system of prize-giving, order of merit, and perpetual comparison of different boys, and is crowned at the University in many cases by the honour of a good first-class. But the facts seem to show that these selected men are no more likely to succeed than anyone else. Success seems to be still due either to accidents of birth or position, or to a certain freshness and vivacity of mind and temper which are not likely to be encouraged by any system involving strenuous work for a chain of examinations. And it is always important that a young man beginning life should be under no delusion as

to what other men expect from him, and how far his highly prized talents will carry him. Clearly then what is required for him is an early and continuous contact with a mixed group of other boys growing up alongside, and as much as possible of free interaction of the less scholastic upon the more scholastic, and of the strong-minded, thoughtful, but unspecialised boy upon the highly specialised pure scholar or mathematician. But this free mixture of all sorts together is a good deal impaired when a few prominent schools tend to become conservatories of all the clever boys who can afford to go to them or are successful in their scholarship examinations. Doubtless there is a great deal of wholesome mixture still in schools which do not possess a department set apart for foundationers, and it must be admitted that if the individual scholars alone are considered it is not easy to trace the evil effects of a too pronounced intellectuality in their school surroundings, unless it be in the close preserves of such "college" communities as those of Eton and Winchester, where there does appear to be a loss owing to the separation of classes.

But if there is room for doubt as to the effects of more or less segregation on individuals, there is no doubt whatever that all the less forward schools suffer. The rage for athletics at the present day has, as we all know, its good side; but the task of a schoolmaster who is anxious to keep athleticism in its proper place, to prevent the powerful stream from bursting its banks, is certainly rendered more difficult if he has to cope with a mass of boys predominantly unintellectual. It is true that this argument may be overpressed. The precocious scholars are generally uninfluential boys, anyhow till they are nearly eighteen, and their presence in a boarding-house does not necessarily conduce to the checking of the chatter about games. Indeed it is a singular fact that boys who win prizes and even at times manifest a decided literary taste are not only unwilling but positively unable to discuss the books they read; and further, they not unfrequently join eagerly in athletic talk simply to keep themselves in touch with their schoolfellows. This fact must be borne in mind when the advisability of fusing clever boys and others is under discussion. We would rather point to the general depression in intellectual effort which unquestionably results from an almost total want of the legitimate encouragement of success. Nobody can doubt that just as football or cricket in a school is stimulated by the visible prowess of one of the boys, so the sixth form generally feel a spur to their energies whenever one of their number gains a distinction in competition with other schools. They need the plain proof that success is within the reach of someone not wholly unlike themselves; that is one effect of the presence of clever boys among them. The other is equally beneficial. It consists in the general feeling of honest pride in a reputation fairly won by hard work for the school at large, and in the sense that this reputation must be maintained. *Spartam nactus es: hanc exorna*. And it is worth observing that the educational world generally, in spite of certain

misgivings as to the precise ethical colour of some of our systems, have concurred with great unanimity in making the intellectual and other triumphs of the schoolboys so far an occasion of public notice and reward as to ensure that if possible this kind of encouragement shall not be wanting. As already remarked, the whole proceeding becomes unreal when the clever boys have to be bought with a heavy money outlay. But we may hope that the unsparing efforts of head masters and governing bodies to attract clever boys are mainly a witness to their conviction that the intellectual life of the school is wholesomely fostered by the annual infusion of some promising talent and by the recurrent successes of the senior boys.

This being so, it may be imagined how disheartening it is to teachers in the common run of schools to find that in spite of all their outlay, in spite of every possible pains taken with the teaching, the standard of scholarship steadily declines, and with it a great deal of the legitimate encouragement to brain-work throughout all classes of each school. A considerable effect was made by a speech delivered at the Head Masters' Conference, by a head master of one of the lesser schools describing the process whereby such a school was almost invariably deprived of the one or two promising boys who might chance to have been committed to them, simply because the richer schools were able to allure them away by liberal scholarships. But it is interesting to notice that a similar pinch is now felt by many larger schools; not because they fail to hold out the old pecuniary inducement, but solely because the competition among the preparatory schools is bearing its inevitable fruit. The scholarships to which most *scholarships* is attached are those for which the best boys compete; a certain circle of schools get the second-best boys, and a larger circle still below them have to be content with the third-best. Occasionally, of course, the diagnosis of a thirteen-year-old boy's powers is falsified by results. One who is rated at third-class at thirteen turns out first-class at nineteen and *vice versa*. But, as a rule, the prognostications are tolerably sound, and the consequent difficulty is being felt in an increasing degree. It is, moreover, unfortunate that the modern craze for comparisons and record-breaking and the like should have coincided with this particular state of things. Certain newspapers think that it pays to publish an elaborately compiled list of honours gained by different schools. There are many facts easy to enumerate, which necessarily make the comparison in the highest degree fallacious; but the peculiar effect of the action of the Preparatory Schools is quite enough by itself to deprive the list of any value as a record of sound teaching and learning; and it may be that most thoughtful readers have ceased to concern themselves much with its contents. None the less, however, a great deal of injustice is done. Twenty or thirty years ago the teaching and classical tone of any particular school could be pretty fairly gauged by their fruits. Nowadays this is almost impossible, and if the critics of the public schools were fully alive to the forces at work below the surface, no doubt fair allowance would be

made; but they very often know nothing beyond what they see at the University, and judging, as they do, by the class lists in the public press, they judge wrongly.

But whatever view may be taken of this effect of the action of the Preparatory Schools, it is for many reasons important that it should not be ignored, and particularly so because it is a plain indication of the fact that these schools occupy to-day a prominent part in the educational field, or rather, to change the metaphor, they are the lower storey in the educational fabric on which the superstructure inevitably rests. Twenty years ago, when they were in a totally disconnected amorphous condition, it would have been impossible to make any such statement about them. But the end of the century has been marked not only by an astonishing increase in their numbers and efficiency, but by the early stages of their corporate organisation; their formation into an Association in which common aims and difficulties are freely discussed, and the first attempts made—not without considerable promise of success—towards co-operation with the Public Schools in educational effort. Hitherto among the subjects which have engaged their attention, numerous and important though they have been, this particular effect of competition in its action on the Public Schools has not found a place. There are difficulties in the way of corporate action being instituted towards the solution of the question, but none the less it should be recognised that the more clearly the Preparatory Schools realise that they form a component part of the educational system of the country the more careful they should be to consider the effect of their action not on themselves alone, but on the boys first, and secondly on the Public Schools. It has been calculated that about 10,000 boys of the highest social stratum in the country are now being educated at the Preparatory Schools of the class under consideration; and it would seem to be a matter of very general interest that the intellectual pick of those boys should be fairly evenly distributed among the foremost Public Schools.

Arising out of this closeness of relation between the two classes of schools is the question of the curriculum of studies as it is affected by the various entrance examinations for which the Preparatory Schools train their pupils. It may be remarked that very serious difficulties are felt at the present time in connexion with the subject, and that so far only a very little progress has been made towards their removal.

Briefly it may be said that competition is again at the bottom of the trouble that exists. The Public Schools are anxious to attract promising boys, or rather boys of such special promise as seem likely to do the school credit by ultimately winning honours at the University. It is believed, whether rightly or wrongly, that young boys whose brains are precocious in one line rather than in general knowledge, are likely to turn out prize-winners at the age of eighteen; hence the examinations for entrance scholarships are designed to test precocity in classics or mathematics principally, not because there is any consensus of opinion as to

these subjects being the most beneficial for boys of tender years, but for the reason above stated. But the effect of this is very disastrous. A preparatory schoolmaster who is eager to win entrance scholarships—and all but a very few are eager—suits his time-table so as to give all the promising young boys the requisite amount of teaching in their strong subject. It is easy to see that this means in their case a considerable amount of early specialization. But it is found by experience that this result is not confined to the promising sharp boys. The arrangements made to suit them cannot be elastic enough to be modified in the interests of average or backward boys; so it comes about that all alike are subjected to a curriculum predominantly classical, or, far more rarely, mathematical. And further, this state of things begins for boys as young as ten or eleven years of age.

Of course in the middle of this century, as far as classics, or rather Latin was concerned, no one would have seen much to object to in this effect upon the teaching. But since that time the powerful claims of one subject after another have been forced upon educationists, partly by each other, partly by eloquent spokesmen of public opinion. Roughly speaking, down to 1880 changes were made in many cases with some reluctance by teachers acting under these influences, and in obedience to pressure, such subjects as mathematics and *longo post intervallo* science, then modern languages, then history and geography were successively introduced. But latterly a momentous and far more satisfactory state of feeling has grown up among schoolmasters, viz., that it should be the aim in choosing subjects for the training of the mental powers to keep in view the requirements of children as distinct from youths, and to adapt the teaching to the particular stage the mind has reached at a given age, so as to encourage its activities in their right order. It may be imagined how distasteful to a man imbued with these ideas must be the present feverish attempt to push on the sharp boys to a premature excellence in classics, at the cost of other subjects now recognised as equally important, and to find that, do what he will, it is quite impossible for him to confine the specialization to the few, but that it extends to a large number of others for whom it is manifestly most injurious. There are many young boys whose minds are so ill-adapted to gain profit from language lessons that many teachers must feel impelled to mingle with the Latin or Greek grammar some intellectual exercises of a totally different kind, not less exacting but appealing to the reasoning powers in a different way. Such are mathematics, geography, and manual exercises. The last subject has only lately been recognised as an important means of training the intellect, but there is little doubt among those who have heard the arguments of Prof. Armstrong, Prof. Reichel, and Mr. Rooper, that not only is delicate manual work of great assistance to the growth of the brain, but also that it is most beneficial between the ages of 9 and 16. Again, a great deal might be said about the claims of music on the time of pre-

paratory school boys, not only as a beautiful exercise in itself, but one which tends to lift and purify the life of each little community as a whole; and, moreover, as being a subject which if neglected in early years cannot be taken up, like drawing for instance, later on. And besides these distinct and special claims there is the wider question, how far the truly educating and refining influence of the domestic life of the Preparatory School is marred by the narrowness of the studies and their unsuitability to a large number, and by the rigidity of the time table into which so much of very special teaching has to be fitted? For the majority of little boys quite fresh from home there would seem to be something incongruous and unwholesome in the mere fact of examinations to which large money prizes are attached being in any way an object of general endeavour. At any rate the grand difficulty of approximating to the ideal of learning for the mere sake of knowledge and progress in brain power must obviously be enhanced by the fact of examinations looming ahead of every boy, for which, or rather in the direction of which, every boy is being pushed on, quite irrespective of his aptitudes for the particular studies which are required. It is not uncommonly urged that this tone of misgiving is out of place in reference to such young boys who work simply because their parents wish it, unconscious of "the larger hope." But it is not possible to ignore the gradual steady influence of commercialism on the boy's view of life; it seems on the other hand pretty certain that long before it would be avowed the very young student is pretty well aware of the mundane motive at work, and in any case the objection has no weight whatever against the indubitable fact that be the result on the boy's view of learning what it may, the monotonous rigidity of the curriculum works mischievously on the majority of boys who are not specially fitted for the particular studies necessary for the scholarship examination.

Thus, the request proffered again and again by the Association of Head Masters of Preparatory Schools, that some change be made in the entrance scholarship examinations, allowing due recognition of other subjects than the one for which the scholarships are now awarded, seems to have much sense in it. The head masters take their stand on what one would imagine to be an incontrovertible principle, viz., that specialization in the Preparatory School age (*i.e.*, under 14) is undesirable. They then point out that under present arrangements it is absolutely unavoidable, the constraining cause being the value set on classics for a classical scholarship and on mathematics for a mathematical scholarship, to the total exclusion of other subjects admirably well fitted for young boys, such as French, history, and geography. True, these subjects are asked for, and questions are set, but it has long been found out that the answers are either not marked at all, or so low that it still pays a trainer to drop them altogether for the last eighteen months of the boy's preparatory school career. This means that a boy barely twelve years old will discontinue all but a modicum of mathematics and other subjects, and be pressed on in Latin verses and Greek sentences and the

construing of difficult classical authors, till, by the time he is 13½, he is able to produce remarkably skilful bits of translation, but is contentedly ignorant of English and other history, and has no knowledge whatever of the shape, size, and quality of the countries of the habitable globe, and perhaps more injurious still, does not know whether the Reform Bill came before the Magna Charta, or the sense of either.

It is difficult to believe that the head masters of the large Public Schools would refuse to recognise the gravity of these considerations if once they were put fairly before them. But it seems clear that in some quarters tradition exercises a powerful sway. Men's minds are charged with the memories of days when the classical curriculum was only grudgingly giving place to one or two studies which were to be regarded as intrusive and wholly subordinate to the main subject. And so it comes about that while the Preparatory School masters' plea has been cordially admitted by some, others still hold on to their former position, or only modify it by making it worse; that is to say, they admit other subjects, such as French and mathematics, into the examination for a classical scholarship, but continue to set papers in Latin and Greek of the same stiffness as before, thus rendering the congestion and pressure in the Preparatory Schools worse than ever. For it must be remembered that if a very small minority of the most important Public Schools act in this way the effect is much the same as if all did, only rather worse. Supposing the five most important schools examined in advanced Greek and Latin, the Preparatory Schools could ignore all the other examinations and make their curriculum almost entirely classical from top to bottom. But supposing one only of these five insists on advanced classics, and the other four curtail the Greek and mark French, mathematics, and English grammar fairly high, the Preparatory Schools are at once reduced to grave embarrassments. They must be as classical as possible to suit A, and both classical and semi-modern to suit B, C, D, and E. And, indeed, this seems to be pretty much the present state of affairs, one that cannot be looked upon as very creditable to the co-operative powers of modern schoolmasters. It is most inadequately realised that the standard of the Greek paper and of the Latin verses, set at either Eton or Rugby or Winchester, affects the whole work of at least seven-tenths of the classes in about 100 Preparatory Schools. Indeed, it is hardly too much to say that it affects the whole work of these schools. The result is not only that a false ideal of learning is set upon the pupils from their earliest years, but that the hurry and scurry of the preparation forbids patient, thorough, and gradual grounding even in classics, except at the cost of ignoring other subjects, such as manual training, music, mathematics, and English grammar (to say nothing of history, geography, and French), which the preparatory masters are supported by all expert educationists in declaring to be thoroughly suited to children between 8 and 14. What, then, is the reason of the immoveable attitude taken up by the conservative Public

Schools? It is that formerly the grounding in Latin and Greek was better than it is now, and the misgiving is felt by men who prize the classics above all subjects, lest this clamour be in reality an attack on classics under the specious plea of "no specialization." And some slight colour is given to this notion because the Preparatory Schools undoubtedly do request that the Greek standard should be lowered, and other subjects marked which are now ignored. But there is another and worthier interpretation of this wish. It is that as mathematics, French, etc., are felt by those who have most right to an opinion to be suitable subjects for little boys, the preparatory teachers ask that these subjects be not crowded out by the disproportionate time necessarily given to classics; also that not only should time be allowed them but that they be encouraged in the only practical way, viz., by being marked in the Entrance Scholarship Examinations. Suppose a teacher is convinced on purely educational grounds that this enlarged range of subjects is good for boys of a certain age, would not this be his natural method of procedure? And if that be so, it is unreasonable to suspect any other motive than the educational one, especially as many of the gentlemen who ask for the modern subjects are thorough classical scholars themselves. Moreover, there is a good deal of confusion in the minds of the critics of this movement between a curtailment of a boy's knowledge of one subject at 14 years of age and the stunting of his learning for good and all.

The question that requires to be kept clearly in view, and which very often is altogether blurred, is this: Supposing that for the harmonious development of a boy's mind it is thought advisable that he should not begin Latin verses till he is fourteen, will he be less skilful in that art at nineteen than if he began at eleven? Common sense seems to answer that there would be no perceptible difference, and the same remark applies to advanced Greek, such as Xenophon's *Hellenica* or the narrative of Thucydides. These considerations are just sufficient to dispose of any theory that the movement on the part of the Preparatory Schools Association is a veiled attack on classics.

But the answer to the contention that boys come to the Public Schools less well grounded than they were thirty years ago, is of a different kind. The fact, though it is hardly possible to prove it owing to the great alteration that has taken place in the entrance examination system, may at once be admitted, because the Preparatory Schoolmasters put it forward as one of their difficulties. They mean that public opinion has forced them to undertake far more subjects than used to be taught to little boys, and that if the same standard in the old subjects is insisted on as was reached thirty years ago, it is obviously impossible for the teaching to be as thorough as it was. Either the modern subjects must be scamped, or the teaching of classics will become more and more a rapid lifting of the cleverer boys over difficulties so as to enable them to make a show of solid knowledge, which from the nature of the case they cannot possess. And if it be urged by the classical devotees among the Public

School headmasters that the training should still be, as it once was, almost exclusively classical, the answer is that these very head masters have themselves urged in the Preparatory Schools the modern subjects which they now consider an intrusion and a nuisance. At a recent Head Masters' Conference there were no less than two expressions of opinion which may be taken as instances. The first was with regard to the teaching of English grammar. The meeting appeared to be strongly in favour of advocating increased attention to this subject. Meantime, it was pointed out that of all subjects this was emphatically one which ought to be begun at a very early age, and if this were agreed to it would be another fresh recommendation to the Preparatory Schools to enlarge their curriculum, *i.e.*, another justification for the protest against the present ultra-classical entrance scholarship examinations. No exception whatever was taken to this view. But the other discussion was even more significant. The mover of a resolution in favour of increased attention for music expressly insisted that no great improvement could be expected till the Preparatory Schools taught reading music in class, and trained the best voices, and that to do this these entrance examinations must be modified, so as to allow more time before the age of fourteen. Not only did no one demur, but the resolution was passed unanimously.

The next twenty or thirty years will decide the question whether the grave evils of the present state of things will be remedied by enlightened co-operation among different orders of teachers or not. The remedy would appear to lie in the appointment of a permanent Joint Examination Committee, consisting of Public and Preparatory School headmasters, whose business it would be to determine something of a proportion between the different subjects, the limits of difficulty in such a subject as Greek, and so on. Of course, this would be a long step towards a systematization of the whole scheme of entrance scholarship examinations, and it will be felt at once that this prospect is not one which commends itself to the English mind. In education up to the present time we have acquiesced in a great deal of chaos so long as it was an indication of individual liberty, and the gain of symmetry and system has never been highly rated. But what men fancy they do clearly understand is the mischief of uniformity in methods and training, and of the attempt to turn out a number of young human beings on the same pattern.

It is probable that the power of these alarms will for many years prevent the formation of any such committee as is here suggested. But there are one or two remarks to be made in conclusion which may serve to place the matter in a less controversial light.

It is asserted that any such system would curtail the liberty of the teachers. To estimate the force of this we must know what teachers are meant and what exact kind of liberty is threatened. The liberty at present enjoyed by the public schoolmasters is very great, by the preparatory masters

small and dwindling. Now, as the former are in no way concerned by this proposal, we may leave them on one side, and the question narrows itself down to this: Is the liberty at present enjoyed by preparatory teachers sufficiently valuable to be worth the manifold evils of the reigning confusion, and if so how would it compare with that which would still be retained by them under the new system? The answer is simple enough. In so far as the liberty of a teacher is hampered by a rigid examination to that extent exactly is he hampered now. But there is one significant difference between things as they are and as they would be. At present the Preparatory School master's work is narrowly prescribed for him by authorities over whom he has no sort of control, and in whose counsels he has no share. Under the new system the scheme of examinations for which he would work would be one which he himself has had some indirect share in framing. Which does he prefer? It is true that this description of the present position is not exhaustive. It is not one examination but an indefinite number which he has now to keep before him, and an aggregate of subjects which shows an alarming tendency to increase. So that there is a species of liberty which he enjoys more perhaps under the present system than under any that may take its place. As long as the present high standard of classics continues he has a considerable liberty of choice before him with reference to the numerous "modern" subjects, for while it is obviously certain that he can't teach an elementary knowledge of them all thoroughly, it is a matter entirely at his own discretion which of them he ignores or scamps, and to what extent. The liberty in short which he still enjoys is merely that of choosing in what particulars the mental training he offers is to be imperfect. The constraint under which he works is that which compels him to acquiesce in grave imperfection, when easy and certain improvements are within his reach, the hope of attaining which depends on counsels in which he has no voice. It can hardly be said that the liberty which is said to be imperilled is a very precious possession.

Neither again is the alarm about boys being turned out on one pattern a whit more substantial. The proposal is that certain subjects should be chosen, and a certain limit fixed to each. There the rigid uniformity ends; and it has to be observed that under the present condition of things the obnoxious fact of limitation already exists. There is a point in unseen translation beyond which no papers ever go; and if Greek Iambics were suddenly set it would be felt that the examination had become an absurdity. The indictment against the present system is not that there are limits, but that the limits are arbitrary and variable, and that the addition of five or six subjects to the examination has made no difference in the standard of those that were there before. It is difficult to believe that the reform of this evil can have any relation whatever to the "one pattern" argument. Indeed, the two subjects, if carefully thought about, are seen to be separated by an almost

infinite gulf. An examination by ceasing to be a chaos is not at once endowed with any power to stunt individuality.

The question doubtless demands a good deal of thought and discussion, and it is in view of such discussion that it has seemed well to point out the absolute irrelevance of two topics which are sure to be introduced, and which, if introduced, will turn the discussion into a controversy probably acrimonious, and certainly barren.

E. LYTTTELTON.

EXAMINATIONS FOR ENTRANCE SCHOLARSHIPS AT THE PUBLIC SCHOOLS.

THEIR CHARACTER AND EFFECT ON THE EDUCATIONAL WORK OF PREPARATORY SCHOOLS.

I.

Most of the Public Schools offer scholarships which are competed for by boys at Preparatory Schools or by the younger boys already in the schools.

SEPARATE HOUSES FOR SCHOLARS.

Winchester, Eton, and Westminster provide in each case a separate house (called the College) for their 70 scholars, the fees for these scholars at Winchester are £21 per annum and at Eton £20 10s.

VALUE OF SCHOLARSHIPS AND HOW PROVIDED.

The ordinary fees for a boy at Winchester are £126 per annum, and at Eton £136 10s.

At the other public schools, amounts varying from £100 per annum to £20 per annum, in some cases for two years, in others for the whole school course, are deducted from the fees. In no other schools than Winchester, Eton, and Westminster do the scholars live separately from the other boys, they are distributed among the various houses.

These scholarships are provided by endowments, but in some cases the housemasters are obliged to take a certain number of scholars at reduced fees.

OBJECT OF SCHOLARSHIPS.

The object in view is to attract clever boys, and the examination on which the scholars are elected is regulated with this end. Whatever may have been the original purpose of the endowments out of which these scholarships are provided, they are practically employed at the present time as a means of obtaining a supply of boys who will do their Public School credit by obtaining University or Army distinctions. At a few schools, notably at Marlborough, the Scholarships go chiefly to boys already in the school. In this case it must either be assumed that a preference is shown for boys already in the school or that these boys are so prepared as to have a better chance than outsiders in the particular examination, or that the teaching of young boys in the lower form is better than at Preparatory Schools. The fact may be naturally used as an inducement to parents to send boys young to Marlborough instead of to a Preparatory School.

EXAMINERS.

At Winchester and Eton and many other Public Schools, the examination is chiefly conducted by outside examiners. At Rugby and Marlborough a committee of masters sit and look over the papers and decide the elections. All schools demand a certificate of moral character before electing a boy to a Scholarship; but beyond this no information as to character or attainments on the part of those who have had the previous training of the candidates has any weight. Winchester, Eton, and Rugby publish the names only of the scholars-elect without mentioning the schools they come from. Almost all the other schools publish the names of the Preparatory Schools from which the successful candidates come.

METHODS OF EXAMINATION.

The mode of examination and of election on the results of examination vary very much at the different schools.

SELECTION—TWO SYSTEMS.

There are two principles of selection which are typified best perhaps at Winchester and at Rugby.

One is (*a*) that of electing on an aggregate of marks obtained on papers in Classics, English (History, Geography, and Divinity), Mathematics, and French; this is the case at Winchester. The other (*b*) that of election for special merit in a particular subject, with or without easy qualifying papers on one or more of the other subjects. This is the system at Rugby.

In the (*a*) system papers are set in the four subjects mentioned above up to such a standard that only good boys will get any appreciable marks for any paper. In this way a smattering or superficial knowledge is made useless. The "all round" good boy will beat the boy who is only good at one subject, even though the latter may be somewhat better in that subject than the other boy. This system encourages teaching at the Preparatory Schools in the four subjects mentioned, and discourages dropping some subjects to specialise in one.

In the (*b*) system the election is *either* for Classics, *or* for Mathematics, *or* for Modern Languages. In this the inducement is to get boys up to a very easy pass standard in Classics or French, and to give extra time and attention to Mathematics or to spend as much time as possible on Classics, teaching merely up to a pass standard in French and Mathematics, or to work mainly at Modern Languages and obtaining a pass standard in classics and mathematics.

In many cases there is no qualifying examination at all in the other subjects, and the election is made purely for excellence in the one particular subject.

In other cases the qualifying examination is a farce, and a boy who has spent practically all his time on Classics is not disqualified because he has not been taught any Euclid or Algebra; nor is the boy who has done a good paper in Conic Sections and Trigonometry rejected because his Latin Grammar is weak.

In the two systems the following would be the results :—

Classics.	Mathematics.	French.	English (History Geography, and Divinity).
Max. 500	250	100	100
A. 450	50	20	20
B. 50	220	20	20
C. 350	100	60	60
D. 300	160	80	80

In the (a) system the order would be 1. D. 620.

" " " 2. C. 570.

" " " 3. A. 540.

" " " 4. B. 310.

Whilst in the (b) system A would get a scholarship for Classics, and B would get one for Mathematics ; whilst C and D would be beaten.

The results would probably in neither case differentiate the abilities of the four boys, but merely the methods of training adopted. It is quite conceivable that if D and C had specialised and A and B worked "all round," the results would have been reversed. Probably all the four boys were about on an equality in brain power—the difference is arrived at by differences of teaching. In the (a) case the Public Schools Authorities prefer that boys should be trained "all round" during their preparatory stage ; in the (b) case it is preferred that they should specialise.

The following papers set in the entrance scholarship examinations at Eton, Marlborough, Rossall, Rugby and Winchester in 1899 will exemplify better than any other mode of description the standard required and the Preparatory curriculum that such a standard necessitates.

The limits of age are as follows :—

Eton, A under 14 ; B under 13.

Marlborough, Senior under 15½ ; Junior under 14½.

Rossall, Senior under 15 ; Junior under 14.

Rugby, under 15, but the papers are set mainly with a view to well-taught boys between 13 and 14.

Winchester, under 14 and under 13.

I.—CLASSICS

ETON COLLEGE ELECTION, 1899.—Tuesday, July 4th, 7—9 a.m.

A under 14.—B under 13.

FOR LATIN PROSE..

I have long since avowed my belief that, in accordance with God's purpose, each nation of the earth possesses a peculiar character adapted to the duties assigned to each in the great scheme of human affairs.

Thus to France was appointed by the Supreme Ruler of mankind the duty of civilising the European world. To England it has been given to guide all other states to commercial wealth, to excellence in the useful acts of life, and to political liberty. But to Germany was delegated the highest and noblest trust. For in Germany we revere the mother of nations, the reformer of corrupted religion, the preserver of the liberties and independence of the republic of nations. Weakened as she has been for aggressive war by the division of her territory into so many states, yet in that very weakness she has found her strength in the beneficent career she was destined to pursue. Our age has seen her assumption of her proper place in the republic of letters, and we ourselves are witnesses how, in this new sphere of distinction, she has exhibited the same strength which more than a thousand years ago enabled her to lay in this island the basis of government, of which, if we are true to ourselves, a thousand years will scarcely see the overthrow.

MARLBOROUGH COLLEGE SCHOLARSHIPS.—June, 1899.

LATIN PROSE.

A.—For Seniors only.

Even in the House of Commons, he was, on one occasion during this session, assailed with an insolence and malice which called forth the indignation of men of all parties; but he endured the outrage with majestic patience. In his younger days he had been but too prompt to retaliate on those who attacked him; but now, conscious of his great services, and of the space which he filled in the eyes of all mankind, he would not stoop to personal squabbles. "This is no season," he said, in the debate on the Spanish war, "for altercation and recrimination. A day has arrived when every Englishman should stand forth for his country. Arm the whole; be one people; forget everything but the public. I set you the example. Harassed by slanderers, sinking under pain and disease, for the public I forget both my wrongs and my infirmities!" On a general review of his life, we are inclined to think that his genius and virtue never shone with so pure an effulgence as during the session of 1762.

B.—For Juniors only.

When the advance of spring allowed the troops to move, Caesar called a council of Gallic chiefs. He said nothing of the information which had reached him respecting their correspondence with these new invaders, but, with his usual swiftness of decision, he made up his mind to act without waiting for disaffection to show itself. He advanced at once to the Ardennes, where he was met by envoys from the German camp. They said that they had been expelled from their country, and had come to Gaul in search of a home; they did not wish to quarrel with the Romans; if Caesar would protect them and give them lands,

they promised to be useful to him; if he refused their alliance, they declared that they would defend themselves. They had fled before the Suebi, for the Suebi were the first nation in the world; the immortal gods were not a match for the Suebi; but they were afraid of no one else, and Caesar might choose whether he would have them for friends or foes.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

FOR LATIN PROSE.

For Seniors only.

Such an opportunity was found but too easily. The Sedicini, a Sabellian tribe between Campania and Latium, were hard pressed by the Samnites and received help from the Campani. But even the two peoples united were not equal to the Samnites. On Mount Tifata, a natural stronghold near Capua, the Samnites established themselves, devastated the country, and defeated the Campani as often as they ventured to meet them in the field. These in their distress now turned to Rome, and asked and received Roman help; and thus the Romans and the Samnites met for the first time as enemies in open war. The Romans had been allied with the Samnites for more than twenty years. Of what nature the alliance was we do not know, but it was probable that it was formed not merely for friendship's sake, but for some definite purpose.

For Juniors only.

Yet the Mercii repeatedly assembling stood forward to resist, and if the king would but come and command whither they were to march, and bring with him the leading men of Londinium, they were ready to shed their blood for their country. But he, accustomed to entrust his safety to fortifications, and not to attack the enemy, remained in Londinium, never venturing out for fear, as he said, of traitors. Canutus on the other hand was gaining towns and villages over to his party, and was never unemployed, for he held consultations by night and fought battles by day. Edmundus, after long deliberation, thought it best, in such an emergency, to recover if possible the revolted cities by force of arms, and brought over Utredus, the chief of a tribe on the other side of the Humber, to the same opinion.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—May, 1899.

LATIN PROSE.

Whilst the Emperor lay at Antioch, the punishment of some soldiers excited a sedition in the legion to which they belonged. Alexander ascended the tribunal, and with a modest firmness represented to the armed multitude the absolute necessity, as well as his inflexible resolution, of maintaining the discipline,

which could not be relaxed without the ruin of the Roman name and empire. Their clamours interrupted his mild expostulation. "Reserve your shouts," said the undaunted emperor, "till you take the field against the Persians, the Germans, and the Sarmatians. Be silent in the presence of your sovereign and benefactor. Be silent, or I shall no longer style you soldiers, but citizens, if those indeed who disclaim the laws of Rome deserve to be ranked among the meanest of the people." His threats inflamed the fury of the legion, and their brandished arms already threatened his person. "Your courage," he resumed, "would be more nobly displayed on the field of battle: me you may destroy, you cannot intimidate; and the severe justice of the republic would punish your crime and revenge my death." The legion still persisted in clamorous sedition, when the emperor pronounced with a loud voice the decisive sentence, "Citizens! lay down your arms and depart in peace to your respective habitations."

WINCHESTER COLLEGE ELECTION.—July, 1899.

For Boys under 13 years of age on 1st June, 1899.

FOR LATIN PROSE.

During the tumultuous scenes which followed Alexander's death his body had lain in the palace unburied. There are various reports as to the place selected for its interment. According to one it was to have been transported to the sanctuary of Ammon. But the more probable is, that it was determined it should be deposited in the sepulchre of his ancestors at Aegae. And Aristander the soothsayer is said to have declared that it had been revealed to him that the land where it rested was destined to be ever prosperous and secure from invasion: which, however, was no more than an ancient Greek superstition as to the virtue of a hero's relics. Orders were now given to construct a funeral car worthy of these precious remains, and the General Arridaeus was appointed to escort them toward the western coast.

For Boys 13 years of age before 1st June, 1899.

FOR LATIN PROSE.

After Wolfe's appointment, and on the day preceding his embarkation for America, Pitt, desirous of giving his last verbal instructions, invited him to dinner. As the evening advanced, Wolfe—heated, perhaps, by his own aspiring thoughts—broke forth into a strain of boastfulness. He drew his sword, he rapped the table with it, he flourished it round the room, he talked of the mighty things which that sword was to achieve. The minister sat aghast at an exhibition so unusual from any man of real sense and real spirit. And when at last Wolfe had taken his leave, Pitt seemed for the moment shaken in the high

opinion which his deliberate judgment had formed of Wolfe ; he lifted up his eyes and arms, and exclaimed : " Good God ! that I should have entrusted the fate of the country and of the administration to such hands ! "

ETON COLLEGE ELECTION, 1899.—Tuesday, 4th July
10.30—12.30.

LATIN TRANSLATION.

A.

Translate :—

1. *The poisoned prince calls on his friends to avenge his death.*

Cæsar paulisper ad spem erectus, dein fesso corpore, ubi finis aderat, adsistentes amicos in hunc modum adloquitur : " si fato concederem, iustus mihi dolor etiam adversus deos esset, quod me parentibus liberis patriæ præmature exitu raperent. Nunc scelere Plancinæ interceptus ultimas preces pectoribus vestris relinquo : Si quos spes meæ, si quos propinquus sanguis, etiam quos invidia erga viventem movebat, inlacrimabunt, quondam florentem et tot bellorum superstitem muliebri fraude cecidisse. Erit vobis locus querendi apud senatum, invocandi leges. Non hoc præcipuum amicorum munus est, prosequi mortuum ignavo questu, sed quæ voluerit meminisse, quæ mandaverit exsequi. Flebunt Germanicum etiam ignoti : vindicabitis vos, si me potius quam fortunam meam fovebatis." Iuravere amici, dextram morientis contingentes, spiritum ante quam ultionem amissuros.

2. *Simo begs Chremes to let the wedding take place.*

Si. Ausculta paucis. *Ch.* ausculto ; loquere quid velis.

Si. per te deos oro et nostram amicitiam, Chremes, quæ incepta a parvis cum ætate adcrevit simul, perque unicam gnatam tuam et gnatum meum, cuius tibi potestas summa servandi datur, ut me adjuves in hac re, atque ita uti nuptiæ fuerant futuræ, fiant. *Ch. a.* ne me obsecra : quasi hoc te orando a me impetrare oporteat. alium esse censes nunc me atque olim cum dabam ? si in rem est utrique ut fiant, arcessi iube. sed si ex ea re plus mali est quam commodi utrique, id oro te in commune ut consulas, quasi illa tua sit Pamphilique ego sim pater.

LATIN TRANSLATION.

B.

Translate—

1. *Æmilius restores the fortunes of the day.*

Præerat castris M. Æmilius, qui post paucos annos pontifex maximus factus est. Is, qua fugam cernebat suorum, cum

præsidio omni occurrit; et stare primo, deinde redire in pugnam iubebat, pavorem et turpem fugam increpans. Minabatur exinde, in perniciem suam cæcos ruere, ni dicto parerent; postremo dat signum suis, ut primos fugientium cædant. Hic maior timor minorem vincit: ancipiti coacti metu primo constiterunt; deinde et ipsi redibant in pugnam, et Æmilius cum suo præsidio effuse sequente regi acriter restitit. Ita utroque cornu victores Romani per acervos corporum, quos in media maxime acie cumulaverant, ubi et robur fortissimorum virorum et arma gravitate fugam impederant, pergunt ad castra diripienda.

2. "We have lost our best friend in Celsus."

Quæ mihi de raptu tua venit epistola Celso,
 Protinus est lacrimis umida facta meis.
 Quodque nefas dictu, fieri nec posse putavi,
 Invitis oculis litera lecta tua est.
 Ante meos oculos tanquam præsens imago
 Hæret, et exstinctum vivere fingit amor.
 Crede mihi; multos habeas cum dignus amicōs,
 Non fuit e multis quolibet ille minor;
 Si modo nec census nec clarum nomen avorum
 Sed probitas magnos ingeniumque facit.
 Iure igitur lacrimas Celso libamus adempto,
 Cum fugerem vivo quas dedit ille mihi.
 Carmina iure damus veros testantia amores,
 Ut tua venturi nomina, Celse, legant.
 Hoc est quod possum Geticis tibi mittere ab oris
 Hoc solum est istic quod liquet esse meum.

MARLBOROUGH COLLEGE SENIOR (UNDER 15½) AND JUNIOR
 (UNDER 14½) SCHOLARSHIPS.—June, 1899.

LATIN TRANSLATION.

I.

For Juniors.

Translate into English:—

Septentrionalium partium gentes magnis corporibus insignes, oculis caeruleis, comis ac barbis rutilis erant. Militiæ ad labores erant impigri, domi segnes; ceterum inediae quam sitis, frigoris quam solis meridiani patientiores. Urbes contemptui habebant tamquam vel inertibus receptaculum vel furibus latebras; has igitur in victis regionibus vel incendio debebant vel situ delapsuras relinquebant; neque vicos nisi saeculis demum interpositis cingendi mos inlatus est. Suam quisque domum certo spatio circumdabant, qua vel pascerentur armenta, vel si quibus agri victum suppetebant, mulieres et servi culturam exercerent. Vestitus Germanis, ut frigoribus patientia firmatis, admodum erat exiguus. Nempe ex humeris suspendebant juvenes venandi præmia, ferarum exuvias; faeminae autem laneos amictus induebant modo plumis, modo maculis pellibusque variatos.

II.

For Seniors.

Anaxagoræ inter familiares suos de natura rerum disserenti, filii mortem nuntiatam tradunt; nihilque aliud ab eo responsum, nisi, se illum genuisse mortalem. Praeclara vero vox et vere digna, quæ a tanto viro emitteretur. Non enim sane video, quid sapientius aut constantius dici posset. An adolescentem illum esse mortuum? Fracti hoc animi nec in rebus adversis admodum firmi signum fuisset. An angere sese non sua, sed filii causa? Num igitur ignorare se fateretur, quantis e malis elapsus esset filius? An se quidem dolere, sed tamen humanum casum agnoscere? Ubi ergo hominis gravitas, iudicium, sapientia? aut quomodo ab imperitorum turba distabit? e quibus tamen saepe multi nec iis rebus anguntur, quæ necessario eveniunt, nec, quo minus eveniant, quum communes omnibus sint, laborandum ullo pacto censent.

MARLBOROUGH COLLEGE SCHOLARSHIP EXAMINATION.—
June, 1899.

UNSEEN TRANSLATION.

No Dictionaries allowed.

LATIN TRANSLATION.

A.—For Seniors only.

THE FLIGHT FROM ROME.

Tum quæ tuta petant, et quæ metuenda velinquant
Incenti, quo quemque fugæ tulit impetus, urgent
Præcipitem populum. Qualis cum turbidus Auster
Reppulit a Libycis immensum Syrtibus æquor,
Fractaque veliferi sonuerunt pondera mali,
Desilit in fluctus deserta puppe magister,
Navitaque, et nondum sparsa compage carinæ
Naufragium sibi quisque facit: sic urbe relicta
In bellum fugitur. Nullum jam languidus ævo
Evaluit revocare parens, conjuxve maritum
Fletibus, aut patrii, dubiæ dum vota salutis
Conciperent, tenuere Laræ; nec limine quisquam
Hæsit, et extremo tunc forsitan urbis amatæ
Plenus alit visu: ruit irrevocabile vulgus.

B.—For Juniors only.

THE VISION OF AFRICANUS.

"Sed quo sis, Africane, alacrior ad lutandum rempublicam, sic habeto; omnibus qui patriam conservarint, adjuverint, auserint, certum esse in cælo definitum locum, ubi beati ævo sempiterno fruuntur."

Hic ego, etsi eram perterritus non tam metu mortis quam insidiarum a meis, quæsi tamen, viveretne ipse et Paullus pater et alii, quos nos extinctos arbitraremur.

"Immo vero," inquit, "ii vivunt, qui ex corporum vinculis tanquam e carcere evolaverunt; vestra vero, quæ dicitur vita, mors est quin tu aspicias ad le venientem Paullum patrem?" Quem ubi vidi, equidem vim lacrimarum profudi: ille autem me complexus atque osculans flere prohibebat.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

LATIN TRANSLATION.

Seniors (under 15.)

A.

Proxima nocte, iam fere quum lux appropinquaret, ad illud aedificium, de quo antea dixi, servi P. Fabii frequentes armatique veniunt: introitum ipsi sibi vi manuque patefaciunt: homines magni pretii servos M. Tullii necopinantes adoriuntur, quod facile factu fuit; neque tam multos neque repugnantes multi armati paratique occidunt; tantumque odii crudelitatisque habuerunt, ut eis omnibus gurgulionibus insectis relinquerent, ne, si quem semivivum spirantemque etiam reliquissent, minor is honos haberetur; praeterea tectum villamque disturbant. Hanc rem tam atrocem, tam indignam, tam repentinam nuntiat M. Tullio Philinus, qui graviter saucius e caede effugerat.

gurgulio = "throat," "gullet."

B.

Ut ventum ad sedes, cunctos discedere tectis
Dux iubet, et generum compellat talibus ultro:
"Bellipotens Stilicho, cuius mihi robur in armis,
pace probata fides, quid enim per praelia gessi
te sine? quem merui te non sudante triumphum?
Odrysium pariter getico foedavimus Hebrum
sanguine, Sarmaticas pariter prostravimus alas,
Rhipaeaque simul fessos porreximus artus
in glacie, stantemque rota sulcavimus Istrum.
ergo age, me quoniam caelestis regia poscit,
tu curis succede meis: tu pignora solus
nostra fove, geminos tu dextra protege fratres.
Indue mente patrem, crescentes dilige fetus,
ut ducis, ut soceri; iam iam securus ad astra
te custode ferar."

Juniors (under 14.)

A.

Inter haec Claudius Publius legatus cum tribus millibus armatorum ex urbe accurrit: et ad Vesuvium montem, quo gladiatores se receperant, castris positus, aditum unicum, qui difficile tamen et impeditum iter praebebat, obsedit. Illi, nullas circa stationes conspicati, per abrupta cavasque fauces catenis

ex vite silvestri confectis se demiserunt, uno relicto qui deiectis armis postremo ipse quoque descendit. Dux eorum, postquam omnes incolumes recepit, sollerti cum audacia statim ad castra Romana duxit, et improvisi perciuli consternatione ita terruit Claudium, ut turpi fuga desertis castris aliquot cohortes quatuor et septuaginta gladiatoribus cederent.

B.

Ah! grave quid prodest pondus mihi divitis auri?
 arvaque si findunt pinquia mille boves?
 Sit mihi paupertas tecum iucunda, Neaera;
 at sine te regum munera nulla volo.
 O niveam, quae te poterit mihi reddere, lucem!
 O mihi felicem terque quaterque diem!
 Nec me regna iuvant, nec Lydius aurifer amnis,
 nec quas terrarum sustinet orbis opes.
 Haec alii cupiant; liceat mihi, paupere cultu,
 securo cara coniuge posse frui.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—June, 1899.

LATIN TRANSLATION.

1. Has postquam maesto profudit pectore voces,
 Supplicium saevis exposcens anxia factis,
 Annuit invicto caelestum numine rector,
 Quo tunc et tellus atque horrida contremuere
 Aequora concussitque micantia sidera mundus.
 Ipse autem caeca mentem caligine Theseus
 Consitus oblito dimisit pectore cuncta,
 Quae mandata prius constanti mente tenebat;
 Dulcia nec maesto sustollens signa parenti
 Sospitem Erechtheum se ostendit visere portum.
 At pater, ut summa prospectum ex arce petebat,
 Anxia in assiduos absumens lumina fletus,
 Cum primum inflati conspexit lintea veli,
 Praecipitem sese scopulorum e vertice jecit,
 Amissum credens immiti Thesea fato.
2. Numidae equos conscendunt et obequitare stationibus hostium, neminem lacessentes, coeperunt. Nihil primo adspectu contemptius; equi hominesque paululi et graciles, discinctus et inermis eques, praeterquam quod iacula secum portat, equi sine frenis, deformis ipse cursus rigida cervice et extento capite currentium. Hunc contemptum de industria augentes labi ex equis et per ludibrium spectaculo esse. Itaque qui primo intenti paratique, si lacesserentur, in stationibus fuerant, iam inermes sedentesque pars maxima spectabant. Numidae adequitare, dein refugere, sed propius saltum paulatim evehi, velut quos impotentes regendi equi invitos efferrent; postremo subditis calcaribus inter medias stationes hostium erupere, et in agrum

latiorem evecti omnia propinqua viae tecta incendunt. Proximo deinde vico inferunt ignem, ferro flammaque omnia pervastant. Fumus primo conspectus, deinde clamor trepidantium in vicis auditus, postremo seniores puerique refugientes tumultum in castris fecerunt. Itaque sine consilio, sine imperio pro se quisque currere ad sua tutanda, momentoque temporis castra relicta erant, et obsidione liberatus consul, quo intenderat, pervenit.

WINCHESTER COLLEGE ELECTION.—July, 1899.

For Boys under 13 years of age on 1st June, 1899.

LATIN TRANSLATION.

I. Translate:—

Hippias nuper ad tuendum saltum ab rege missus erat; qui, ex quo castra Romana in tumulto conspexit, praeparatis ad certamen animis suorum, venienti agmini consulis obvius fuit. Et Romani expediti ad pugnam exierant et hostes. Levis armatura erat; promptissimum genus ad lacessendum certamen. Congressi igitur extemplo, tela coniecerunt. Multa utrimque vulnera temerario incursu et accepta et inlata: pauci utriusque partis ceciderunt. . . . Ac, pluribus ea die vulneratis quam interfectis, proelium nocte diremtum est.

II. Translate:—

Cernis ut in duris (et quid bove firmitus?) arvis
Fortia taurorum corpora frangat opus.
Quae nunquam vacuo solita est cessare novali
Fructibus assiduis lassa senescit humus.
Occidet, ad Circi si quis certamina semper
(Non intermissis cursibus) ibit equus.
Firma sit illa licet, solvetur in aequore navis
Quae nunquam liquidis sicca carebit aquis.
Me quoque debilitat series immensa malorum,
Ante meum tempus cogit et esse senem.
Otia corpus alunt: animus quoque pascitur illis;
Immodicus contra carpit utrumque labor.

III. Translate:—

At sine hac gladiatoria iracundia videmus progredientem apud Homerum Ajacem multa cum hilaritate, cum depugnaturus esset cum Hectore; cuius, ut arma sumsit, ingressio laetitiam attulit sociis, terrorem autem hostibus; ut ipsum Hectorem (quemadmodum est apud Homerum) toto pectore tementem provocasse ad pugnam poeniteret. Atque hi, colloqui inter se, priusquam manum consererent, leniter et quiete, nihil ne in ipsa quidem pugna iracunde rabioseve fecerunt.

WINCHESTER COLLEGE ELECTION.—July, 1899.

For Boys 13 years of age before 1st June, 1899.

LATIN TRANSLATION.

I. Translate:—

Castigabat quidam filium suum, quod paulo sumptuosius equos et canes emeret. Huic ego, iuvene digresso, "Heus tu, nunquamne fecisti quod a patre corripui posset? Non interdum facis quod filius tuus, si repente pater ille, tu filius, pari gravitate reprehendat? Non omnes homines aliquo errore ducuntur? non hic in illo sibi, in hoc alius, indulget?" Haec tibi admonitus immodicae severitatis exemplo, pro amore mutuo, scripsi; ne quando tu quoque filium tuum acerbius duriusque tractares. Cogita et illum puerum esse, et te fuisse.

II. Translate:—

Propulit ut classem velis cedentibus Auster
Incumbens, mediumque rates tenere profundum,
Omnis in Ionios spectabat navita fluctus,
Solut ab Hesperia non flexit lumina terra
Magnus, dum patrios portus dum litora nunquam
Ad visus reditura suos tectumque cacumen
Nubibus et dubios cernit vanescere montes.
Inde soporifero cesserunt languida somno
Membra ducis. Diri tum plena horroris imago
Visa caput moestum per hiantes Julia terras
Tollere et accenso furialis stare sepulchro.

III. Translate:—

O fallacem hominum spem, fragilemque fortunam, et inanes nostras contentiones! quae in medio spatio saepe franguntur et corruunt, et ante in ipso cursu obruuntur quam portum conspiciere potuerunt. Nam, quamdiu Crassi fuit ambitionis labore vita districta, tamdiu privatis magis officiis et ingenii laude floruit quam fructu amplitudinis aut reipublicae dignitate. Qui autem ei annus primus ab honorum perfunctione aditum (omnium concessu) ad summam auctoritatem dabat, is eius omnem spem atque omnia vitae consilia morte pervertit. Fuit hoc luctuosum suis, acerbum patriae, grave bonis omnibus.

ETON COLLEGE ELECTION, 1899.—Wednesday, 5th July,
7—9 a.m.

A and B.

LATIN AND GREEK GRAMMAR.

1. Give the abl. sing. and acc. plur. of *sal*, *amans* (subst. and part.), *auceps*, *aries*, *domus*; and the gen. sing. and acc. plur. of *αστήρ*, *ίμάς*, *βοῦς*, *άνθος*, *Σοφοκλής*.

2. Give the perfect and sup. of *torreo*, *neglego*, *meto*, *tingo*; the imperf. ind. act. of *ἔρπω*, *ἀναιρῶ*, *ὠνοῦμαι*, *καθίζομαι*; and the aor. act. of *ἀναλίσκω*, *κλαίω*, *πίμπλημι*, *χέω*.

3. Parse *eluxi*, *ausim*, *aquai*, *fare*: *ἔαγι*, *ἔλῳ*, *ἔτῳ*, *κεκμηότα*.

4. Show by examples the constructions the following words admit of:—*suadeo*, *minor*, *piget*, *dubito*; *κατακρίνω*, *ἀμύνω* (act and mid.), *μεταδίδωμι*.

5. Distinguish between the use of *nequis*—*ut nemo*, *tum*—*deinde*, *quivis*—*aliquis*; *ὅτε*—*ἐπειδή*, *ἕως* with aor. and imperf., *μετά* with gen. dat. and acc.

6. Parse and explain the formation of *θᾶσσον*, *μεσαίτερος*, *εἶλον*, *σχέις*; discuss the spelling of *sylva*, *vulgus*, *sepulchrum*; and give the meaning of *HS. SPQR. CCIOO. SPD*.

7. Explain the term "Middle Voice": with what meanings is it used in Greek? What traces of it do you observe in Latin?

8. Put into Latin and Greek:—

i. At my house, in our time, on this condition.

ii. Had I happened to have been present, I should not have done so.

iii. I came to tell you I was ready, so that you might know what to do.

iv. He said he would not go himself before Caesar returned.

MARLBOROUGH COLLEGE SCHOLARSHIPS.—June, 1899.

GREEK AND LATIN GRAMMAR.

1. Decline *γόνυ*, *ὁδός*, and *ἀσθενής* in the sing., and *ναῦς*, *ποῦς* and *γυνή* in the plural.

2. Write down the gen. sing. and the dat. plur. of *γραφείς*, *φάλαγξ*, *δόξα*, *κέρας*, *υἱός*, *ἥσσω*.

3. Compare *ταχύς*, *αἰσχρός*, *πρὸς*, *μάλα*, *ἄφρων*.

4. Give the Greek for: 19 men and 21 women, he was put to death with 6 others, on the 30th day, 10,000 soldiers.

5. Distinguish *ἄλλα*, *ἀλλά*, *τὰ ἄλλα*, *ἄλληλα*; *ταῦτα*, *ταὐτά*. Decline *δοτὶς* in the sing.

6. Form the perfect indic. pass. of *τρίβω*, *πείθω*, *φράζω*, *ἀγγέλλω*, and write out *one* of them in full.

7. Give the future, the aorist, and the perfect, active, and the perfect and aorist passive, of: *τρέχω*, *ἔσθίω*, *εὕρισκω*, *λαγχάνω*, *τέμνω*, *καλέω*.

8. What are principal uses of the dative case in Greek? Give instances.

9. What cases are governed by: *clam*, *sub*, *fruo*, *celo*, *interest*, *impero*, *circumdo*? Give instances.

10. Form the imperfect subjunctive of: morior, video, fero, edo, prosum. Write out in full the present indic. of aio, and the future indic. of prodo.

11. Give the genitive and accusative singular, and the genitive plural of verax, simplex, alter, domus, dives.

12. Turn into Oratio Obliqua: Si iterum, inquit, experiri vultis, ego iterum paratus sum ad decertandum, si pace uti mavultis, iniquum est de stipendio recusare, quod vestro voluntate adhuc pependistis.

13. Translate into Latin:—

(1) Who are you? Tell me, who you are. (2) I cannot be persuaded that you are not afraid that he will tell the truth. (3) He has told me the same as you did. (4) He replied that, if I had written the letter, I should have done him an injustice. (5) As long as life lasts, I will do this. Provided that life lasts, I will do this.

14. Translate into Greek:—

(1) By means of (διά) his soldiers he conquered the enemy and established (καθίστημι) his own power (ἀρχή). (2) I met with (τυγχάνω) a greater reverse (ἥσσαν) at the hand of (πρός) Cyrus than I had hitherto (ἤδη) experienced (πάσχω). (3) They saw from (ἀπὸ) the hill an army drawn up (τάσσω) against (ἐπὶ) their own men. (4) You have heard this story from (παρά) my enemies. (5) We used to go down from the city (ἄστυ) to the camp.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

LATIN AND GREEK GRAMMAR.

N.B.—Latin and Greek to be shown up separately.

LATIN.

I.

1. Give dative singular, genitive plural, and English of: magister—imber—plebs—pecus—vis—ædes—acies—uterque—volucer—dives.

2. Give comparative and superlative of: magnus—magnopere—facilis—vetus—nequam—post.

3. Distinguish between: aliquis and aliqui—loci and loca—cecidi and cecidi.

4. Conjugate the present indicative of nolo; present subjunctive of malo; imperfect subjunctive of volo; present indicative of aio; future indicative of intereo; present imperative of fero.

5. Give principal parts and English of: fodio—torqueo—torreo—ardeo—seco—mergo—pergo—promo—rado—concutio—quæro—gigno—tundo—vincio—tueor—orior—ordior.

6. Give the Latin for: 444—20—20th—20 each—20 times—9—19—90—900—9000—March 22nd.

II.

For Juniors only.

7. Give one example of each of the following: inceptive verbs—dative of possessor—ablative of separation—ablative of measure—genitive of quality—place whence—time during which.

8. Translate, saying what constructions are illustrated by, the following:—

Fortuna ludum insolentem ludit.
Exitio est avidum mare nautis.
Nihil est amabilius virtute.
Dignum laude virum musa vetat mori.
Nil nostri miserere.
Clodius a plebe creatus est tribunus.

For Seniors only.

7. Give one example of each of the following:—

Desiderative verbs, accusative of respect, dative of remoter object with compound verbs, ethic dative, ablative of origin, ablative of cause, ablative of price, construction with “interest,” construction with verbs of condemning, prohibitions in second person, infinitive with adjective.

8. Translate, and say what constructions are illustrated by the following:—

Dulce ridere.
Magnus civis obit et formidatus Othoni.
Legiones pulcris armis praeditae.
Quanti id emit? Vili.
Mihi ab istis noceri non potest.

9. Give examples of constructions after: ut—quominus—quin—dummodo—quamvis.

10. Turn into Oratio Obliqua:—

Quoniam me una vobiscum servare non possum, vestrae quidem certe vitae prospiciam quos in periculum deduxi, vos vobis consulite. Frustra meae vitae subvenire conamini, quem jam vires deficiunt.

GREEK.

I.

1. Give genitive singular, dative plural, and English of: *νιός*—*ὑδωρ*—*ἀηδών*—*κίρας*—*νεανίας*—*νήσος*—*γένος*—*ἀλήθεια*—*χαρμεις*—*μέγας*—*εὐνους*—*ἐγώ*—*αὐτός*.

2. Give comparative, superlative, and English of: μέλας—μέγας—ἴσος—ἥδυσ—ὀλίγος—ῥαδῖος—ταχέως—ἀγχι.
3. Give the various ways of forming the present stem.
4. Give the paradigms of οἶδα, φημί, εἰμι; of aorist active of τίθημι, and ἵστημι; of aorist pass. of τιμάω.
5. Give a future, aorist, perfect, and English of: ἀμαρτάνω—διδάσκω—βάλλω—ἐλάνθω—εὐρσκήω—ἡδομαι—κάμνω—κρεμάννυμι—ὀμνυμι—πίπτω.
6. What is the Greek for: 7—7th—7 times; 50—50th—50 times; 200—200th; 9—90—900.

II.

For Juniors only.

7. State, with examples, the uses of ἐπί.
What prepositions govern the genitive only? giving with each one idiomatic phrase in which it occurs.
What is the Greek for?—
To be friendly with anyone.
To the best of one's ability.
To hold of no account.
8. State, with examples, the uses of:—
(1) The accusative absolute.
(2) Subjunctive in independent sentences.

For Seniors only.

7. State, with examples, the uses of πρός.
8. Give the Greek for:—
This is beyond the power of man.
The School of Plato.
In the reign of Cyrus.
So far as in me lies.
He saw a corpse of superhuman size.
He has been ill (use νοσέω) these ten years.
9. Give examples illustrating the use of the imperfect—gnomic aorist—epexegetical infinitive—partitive genitive—attraction of the relative.
10. Translate, and say what constructions are illustrated by, the following:—
ἀπέχει ἡ Πλάταια σταδίους ἑβδομήκοντα.
πίνω οἶνον, ἐσθίω κρεῶν.
μεμνήσθῃ μοι μὴ θορυβεῖν.
ἑδύνοντο Κύρου προθύμου γενέσθαι.
ὦ παῖ, γένοιτο πατὸς εὐτυχέστερος.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—June, 1899.

LATIN AND GREEK GRAMMAR.

1. (a.) Gender, accusative singular, and meaning of:
supellex, aer, sitis, vulgus, glis.
νόσος, τριήρης, κύων, κόρυς, χάρις.
- (b.) Comparative, superlative, and meaning of:
vetus, nequam, βραδύς, πολυπράγμων.
- (c.) Dative plural and meaning of:
uterque, alacer, μέλζων, εἰδώς.
- (d.) Perfect, supine, infinitive, and meaning of:
cieo, mulceo, pario, compello, fio.
- (e.) Paradigm of the Moods of:
ἔγνων, εἶδον, ἐπίσταμαι.
- (f.) 1st sing., future, perfect, and aorist indic. active of:
λείπω, ἵστημι, ὄμνυμι, δίδω.
2. Put into Latin :
 - (a.) That is not a thing anyone could do—I don't think anyone could do that—Don't spare the rod and you won't spoil the child—Two thousand men with two garments each fled on June 4th.
 - (b.) Put into Greek :
We did it ourselves—He was one of a board of eight—I know I am wiser than you—He died of a dreadful disease.
3. Translate, with notes on syntax :
 - (a.) Non dubito hoc futurum.
 - (b.) Me caecum, qui haec ante non viderim !
 - (c.) Me truncus illapsus cerebro Sustulerat nisi Faunus ictum . . . levasset.
 - (d.) εἴ που τινὰ μὴ ἐργαζόμενον ἴδοι, ἔπαιεν.
 - (e.) ἀλλὰ μὴ οὐ τοῦτ' ἢ χαλεπον, ὦ ἄνδρες.
 - (f.) οὐ σὺγ' ἀνέξει μηδὲ δειλίαν ἀρεῖ;
4. Put into Oratio Obliqua in historic sequence :
Quid vis, mi fili ? Num credis fore ut tibi noceam ? At hoc, quod volo, e re tua est ; et si quid invenero pecuniae, tibi dabo.
5. Comment on the forms : faxit, olim, traxe, πίπτω, Ἀθήνηθεν, ὁλοίατο Explain meaning and use of particles ἦ, κεῖν, δῆ.

WINCHESTER COLLEGE ELECTION.—July, 1899.

For Boys under 13 years of age on 1st June, 1899.

GRAMMAR.

I. Give genitive singular and accusative plural of :—genus—os—crus—lepus ; accusative singular and dative plural of :—*χαρίεις*—*ἰστώς*—*οὗτος*—*πολύς*.

II. Give comparative and superlative of :—*ἐχθρός*—*σωφρόνως*—*ταχύς*—*similis*—*pulcre* ; the Latin for :—200 women—5th July, 1899—three apiece—twenty times.

III. Give in the active voice :—

1. Perfect, supine, and infinitive of :—*pasco*—*vincio*—*vivo*—*pario*—*jacio*.

2. Future, perfect, and 2nd (or strong) aorist of :—*ἴστημι*—*γινώσκω*—*ὀράω*—*ἴχω*—*ὑπισχνέομαι*.

IV. What constructions are used, and in what meanings, with :—*prae*—*sub*—*ὑπό*—*παρά*—*ἐπὶ* ?

V. What is meant by :—Ablative or Genitive Absolute—Final Conjunction—Adverbial Clause—Oratio Obliqua—Sense Construction ? Give examples of each in Latin or Greek.

VI. Put into Latin :—

1. Do not ask him what he is going to do.

2. The boy was too lazy to work ; and so dirty, that he seldom washed if he could help it.

3. To become learned, there is need of labour.

4. The laws of our country must be obeyed by all good citizens.

5. They could not prevent him from going away, however much any of them tried to persuade him to stop.

WINCHESTER COLLEGE ELECTION.—July, 1899.

For Boys over 13 years of age on 1st June, 1899.

GRAMMAR.

I. Give genitive, singular, and accusative plural of :—genus—os—crus—lepus ; accusative singular and dative plural of :—*χαρίεις*—*ἰστώς*—*οὗτος*—*πολύς*.

II. Give comparative and superlative of :—*ἐχθρός*—*σωφρόνως*—*ταχύς*—*similis*—*pulcre* ; the Latin for :—200 women—5th July, 1899—three apiece—twenty times.

III. Give in the active voice :—

1. Perfect, supine, and infinitive of :—*pasco*—*vincio*—*vivo*—*pario*—*jacio*.

2. Future, perfect, and second (or strong) aorist of :—*ἴστημι*—*γινώσκω*—*ὁράω*—*ἔχω*—*ὑπισχνέομαι*.

IV. Parse :—*εἰδῶμεν*—*πείστέον*—*ἀπόδος*—*ὑιοσόν*—*ἀπῆξα*—*ὑφέσθαι* ; and give the principal tenses of each verb.

V. What are the principal constructions used with :—*quin* *quod*—*si*—*ἵνα*—*ὥστε*—*πρίν* ? Quote or make examples of each.

VI. Put into Latin :—

1. He was on the point of starting when he heard that Caesar had come.

2. Do not hesitate to wait till you receive the letter.

3. The boy was too lazy to work ; and so dirty, that he seldom washed if he could help it.

4. He doubted if he could possibly arrive in time ; but he promised, if he did, to give the man anything he liked.

5. He kept on thinking whether he should succeed or not, instead of making up his mind, as he should have done, to do his best, whatever might happen.

ETON COLLEGE ELECTION, 1899.—Wednesday, July 5th,
3—5 p.m.

A

GREEK TRANSLATION.

The secret of happiness in old age.

Εὖ οὖν μοι καὶ τότε ἔδοξεν ἐκεῖνος εἰπεῖν, καὶ νῦν οὐχ ἦττον. παντάπασι γὰρ τῶν γε τοιούτων ἐν τῷ γῆρα πολλὴ εἰρήνη γίγνεται καὶ ἐλευθερία, ἐπειδὰν αἱ ἐπιθυμίαι παύσωνται κατατείνουσαι καὶ χαλάσωσι. καὶ ἐγὼ ἀγασθεὶς αὐτοῦ εἰπόντος ταῦτα βουλόμενος ἵτι λέγειν αὐτὸν ἐκίνουν καὶ εἶπον ὦ Κέφαλε, οἶμαί σου τοὺς πολλοὺς, ὅταν ταῦτα λέγῃς, οὐκ ἀποδέχεσθαι, ἀλλ' ἠγείσθαι σε ῥαδίως τὸ γῆρας φέρειν οὐ διὰ τὸν τρόπον ἀλλὰ διὰ τὸ πολλὴν οὐσίαν κεκτήσθαι τοῖς γὰρ πλουσίοις πολλὰ παραμύθια φασιν εἶναι. Ἀληθῆς, ἔφη, λέγεις. οὐ γὰρ ἀποδέχονται. καὶ λέγουσι μὲν τι, οὐ μέντοι γε ὅσον οἶονται, ἀλλὰ τὸ τοῦ Θεμιστοκλέους εὖ ἔχει, ὃς τῷ Σεριφίῳ λοιδορουμένῳ καὶ λέγοντι, ὅτι οὐ δι' αὐτὸν ἀλλὰ διὰ τὴν πόλιν εὐδοκιμοῖ, ἀπεκρίνατο ὅτι οὐτ' ἂν αὐτὸς Σεριφίος ὢν ὀνομαστὸς ἐγένετο οὐτ' ἐκεῖνος Ἀθηναῖος. καὶ τοῖς δὴ μὴ πλουσίοις, χαλεπῶς δὲ τὸ γῆρας φέρουσιν εὖ ἔχει ὁ αὐτὸς λόγος, ὅτι οὐτ' ἂν ὁ ἐπιεικὴς πάνυ τι ῥαδίως γῆρας μετὰ πενίας ἐνέγκοι οὐθ' ὁ μὴ ἐπιεικὴς πλουτήσας εὐκόλος ποτ' ἂν ἑαυτῷ γένοιτο.

"In eternal lines to time thou growest."

Ἀκρόπολις καὶ πύργος ἐὼν κενεόφρονι δῆμῳ,
Κύον', ὀλίγης τιμῆς ἔμμορεν ἐσθλὸς ἀνὴρ.

σοὶ μὲν ἐγὼ πτέρ' ἔδωκα σὺν οἷς ἐπ' ἀπείρου πότον
 πωτήσῃ κατὰ γῆν πᾶσαν ἁειρόμενος
 ῥηϊδίως· θοίναις δὲ καὶ εἰλαπίνῃσι παρέσση
 ἐν πάσαις πολλῶν κείμενος ἐν στόμασι.
 καὶ σε σὺν αὐλίτκοισι λιγυφθόγγοις νέοι ἄνδρες
 εὐκόσμως ἐρατοὶ καλὰ τε καὶ λιγέα
 ἄσσονται· καὶ ὅταν δνοφέροις ὑπὸ κεύθμασι γαίης
 βῆς πολυκωκύτους εἰς Ἀἶδαο δόμους,
 οὐδέ ποτ' οὐδέ θανῶν ἀπολείς κλέος, οὐδέ γε λήσεις
 ἄφθιτον ἀνθρώποις αἰὲν ἔχων ὄνομα,
 Κῦρνε, καθ' Ἑλλάδα γῆν στρωφώμενος ἢ δ' ἀνὰ νήσους,
 ἰχθυύοντα περῶν πόντον ἐπ' ἀτρύγετον,
 οὐχ ἵππων νότοισιν ἐφήμενος· ἀλλὰ σε πέμψει
 ἄγλαα Μουσάων δῶρα ἰοστεφάνων.

B

GREEK TRANSLATION.

*The Lacedæmonians moderate the demands of their allies
 on Athens.*

Λακεδαιμόνιοι δὲ οὐκ ἔφασαν πόλιν Ἑλληνίδα ἀνδραποδιεῖν,
 μέγα ἀγαθὸν εἰργασμένην ἐν τοῖς μεγίστοις κινδύνοις γενομένης
 τῇ Ἑλλάδι· ἀλλ' ἐποιοῦντο εἰρήνην, ἐφ' ᾧ τὰ τε μακρὰ τεῖχη
 καὶ τὸν Πειραιᾶ καθελόντας, καὶ τὰς ναῦς πλὴν δώδεκα παρα-
 δόντας, καὶ τοὺς φυγάδας κατὰξαντας, τὸν αὐτὸν ἐχθρὸν καὶ
 φίλον νομίζοντες, Λακεδαιμονίοις ἔπεσθαι καὶ κατὰ γῆν καὶ κατὰ
 θάλατταν, ὅποι ἂν ἡγῶνται. Θηραμένης δὲ καὶ οἱ σὺν αὐτῷ
 πρέσβεις ἐπανεφέροντο ταῦτα ἐς τὰς Ἀθήνας. εἰσιόντας δ'
 αἰτοῖς ὄχλος περιεχεῖτο πολὺς, φοβούμενοι, μὴ ἄπρακτοι ἦκοιεν·
 οὐ γὰρ ἐτι ἐνεχώρει μέλλειν, διὰ τὸ πλῆθος τῶν ἀπολλυμένων
 τῷ λιμῷ. τῇ δὲ ὑστεραία ἀπήγγελλον οἱ πρέσβεις, ἐφ' οἷς οἱ
 Λακεδαιμόνιοι ποιοῦντο τὴν εἰρήνην· προηγόρει δὲ αὐτῶν Θηρα-
 μένης, λέγων, ὡς χρή πείθεσθαι Λακεδαιμονίοις, καὶ τὰ τεῖχη
 περιαιρεῖν. ἀντειπόντων δὲ τινῶν αὐτῷ, πολλῶ δὲ πλείονων
 ξυνεπαίνεσάντων, ἔδοξε δέχεσθαι τὴν εἰρήνην.

Kreon laments the death of his son Menæceus.

- ΚΡ. οἶμοι, τί δράσω; πότερ' ἱμαυτὸν ἢ πόλιν
 στένω δακρύσας, ἣν περίξ ἔχει νέφος
 τοιοῦτον ὥστε δι' Ἀχέροντος ἰέναι;
 ἐμός τε γὰρ παῖς γῆς ὄλωλ' ὑπερθανὼν
 τοῦνομα λαβὼν γενναῖον, ἀνιάρων δ' ἐμοί·
 βοᾷ δὲ δῶμα πᾶν· ἐγὼ δ' ἦκω μετὰ
 γέρων ἀδελφὴν γραῖαν Ἰοκάστην, ὅπως
 λούσῃ προθήταί τ' οὐκέτ' ὄντα παῖδ' ἐμόν.
 τοῖς γὰρ θανούσι χρή τὸν οὐ τεθνηκότα
 τιμὰς εἰδόντα χθόνιον εὐσεβεῖν θεῶν.
- ΧΘ. βέβηκ' ἀδελφὴ σὴ, Κρέων, ἔξω δόμων,
 κόρη τε μητρὸς Ἀντιγόνη κοινῷ ποδί.
- ΚΡ. ποῖ κύπῃ ποῖαν συμφορὰν, σήμαινέ μοι.
- ΧΘ. ἤκουσε τέκνα μονομάχῳ μέλλειν δορὶ
 εἰς ἀσπίδ' ἥξειν βασιλικῶν δόμων ὑπερ.

MARLBOROUGH COLLEGE SCHOLARSHIPS.—June 1899.

GREEK TRANSLATION.

(For Seniors.)

Γενομένης δ' ἰσχυρᾶς τῆς ναυμαχίας καὶ πολλῶν νεῶν ἀμφοτέροις καὶ ἀνθρώπων ἀπολομένων, οἱ Συρακόσιοι καὶ οἱ ξύμμαχοι ἐπικρατήσαντες τὰ τε ναύαγια καὶ τοὺς νεκροὺς ἀνείλοντο καὶ ἀποπλεύσαντες πρὸς τὴν πόλιν τροπαῖον ἔστησαν, οἱ δ' Ἀθηναῖοι ὑπὸ μεγέθους τῶν παρόντων κακῶν νεκρῶν μὲν περὶ ἡ ναυαγίων οὐδ' ἐπενόουν αἰτῆσαι ἀναίρεσιν, τῆς δὲ νυκτὸς ἐβούλοντο εὐθύς ἀναχωρεῖν. Δημοσθένης δὲ Νικία προσελθὼν γνώμην ἐποιεῖτο πληρώσαντες ἔτι τὰς λοιπὰς τῶν νεῶν βιάσασθαι, ἣν δύνωνται, ἅμα ἔω τὸν ἔκπλουν, λέγων ὅτι πλείους ἔτι αἱ λοιπαὶ εἰσι νῆες χρήσιμαί σφίσιν ἢ τοῖς πολεμίοις· ἦσαν γὰρ τοῖς μὲν Ἀθηναίοις περίλοιποι ὡς ἐξήκοντα, τοῖς δ' ἐναντίοις ἐλάσσους ἢ πεντήκοντα. καὶ ξυγχωροῦντος Νικίου τῇ γνώμῃ καὶ βουλομένων πληροῦν αὐτῶν, οἱ ναῦται οὐκ ἤθελον ἐσβαίνειν διὰ τὸ καταπεπληχθαι τῇ ἡσση καὶ μὴ ἂν ἔτι οἶσθαι κρατῆσαι.

(For Juniors.)

Διαλεγόμενοι δὲ ἐν ἀλλήλοις κατείδον ἀνθρωπὸν τινα αὐτοῖς προσιόντα καὶ δοκούντα πτωχὸν τε εἶναι καὶ βούλεσθαι τι παρ' αὐτῶν λαμβάνειν. εὐθύς οὖν ἀφικόμενος οὗτος ἤρξατο δακρύνειν, φάσκων ὡς ἐν πολλῇ πενίᾳ ἐστὶ διὰ νόσον τινα δεινοτάτην, ἥπερ βαρέως ἐγκειμένη οὐκ ἔα αὐτὸν ἐπιτελεῖν ἔργον οὐδὲν, οὐδὲ τροφὴν οὐδ' αὖθις εὐρίσκεσθαι. ἀκούσαντες δὲ ἐκεῖνοι μὲν ἡρώτων τίς ἡ νόσος εἴη. ὁ δὲ, “ἀλλ' οὐ δύναμαι,” φησὶν, “ὦ ἄνδρες, ταῦτα ὑμῖν διηγείσθαι.” ὁ μὲν οὖν πτωχὸς τοσαῦτα εἶπεν. οἱ δὲ, ἐλεήσαντες αὐτὸν, καὶ δόντες ὅσα ἐκάστῳ ἐδόκει, ἀπέπεμψαν. ὕστερον δὲ, βουλόμενοί τι καὶ ἀκριβέστερον μαθάνειν, κελεύουσι δούλῳ τινα θεῖν σκευόμενον, ὅσπερ τῆς ἱατρικῆς ἐτυχεν ἐμπειρος ὢν. ἐπιγεγόμενος οὖν οὗτος τῷ πτωχῷ ἐπισκοπεῖ αὐτοῦ τὰ μέλη πάντα, οὐ μέντοι νόσου οὐδεμιᾶς σημεῖα εὐρίσκει. θαυμάσας οὖν πρὸς ταῦτα, “ὦ ἄνθρωπε,” ἔφη, “ποῖαν δὲ νόσον ἔχεις; δοκεῖ γὰρ ἐμοί γε πάνυ ὑγιὲς εἶναι.” ὁ δὲ ἀντίπερ, “ἀλλ' ὡς ἀληθῶς δεινοτάτη μου ἡ νόσος ἐστίν, εἰ καὶ ἀφανὴς οὐσα τυγχάνει· περιέχει γὰρ τὰ μέλη πάντα, τὸ δὲ ὄνομα αὐτῆς ἐστὶν ἀργία.”

UNSEEN TRANSLATION.

(No Dictionaries allowed.)

GREEK TRANSLATION.

A. For Seniors only:

The mother of Agis shares the fate of her mother and son.

Ἐκείνης δὲ καὶ τὴν μητέρα μετ' αὐτῆς παρεῖναι δεομένης οὐδὲν ἔφη κωλύειν ὁ Ἀμφάρης· καὶ δεξάμενος ἀμφοτέρας καὶ πάλιν κλείσαι τὰς θύρας τοῦ δεσμωτηρίου κελεύσας, προτέραν μὲν τὴν Ἀρχιδαμίαν παρέδωκεν, ἥδη σφόδρα πρεσβύτιν οὖσαν καὶ καταγεγηρακυῖαν ἐν ἀξιώματι μεγίστῳ τῶν πολιτίδων, ἀποθανούσης δὲ ἐκείνης ἐκέλευσε τὴν Ἀγησιστράταν ἔσω βαδίζειν. ὡς δὲ εἰσελ-

θοῦσα τὸν τε υἱὸν ἐθεάσατο χαμαὶ κείμενον καὶ τὴν μητέρα νεκρὰν ἐκ τοῦ βρόχου κρεμαμένην, ἐκείνην μὲν αὐτὴ τοῖς ὑπηρέταις συγκαθεῖλε καὶ παρεκτείνασα τῷ Ἀγιδί τὸ σῶμα περιέστειλε καὶ κατεκάλυψε· τῷ δὲ υἱῷ προσπεσοῦσα καὶ φιλήσασα τὸ πρόσωπον “Ἡ πολλή σε” εἶπεν, “ὦ παῖ, εὐλάβεια καὶ τὸ πρῶτον καὶ φιλάνθρωπον ἀπώλεσε μεθ’ ἡμῶν.” Ὁ δὲ Ἀμφίρῃς ἀπὸ τῆς θύρας ὁρῶν τὰ γιγνόμενα καὶ τὰς φωνὰς ἀκούων ἐπεισῆλθε, καὶ πρὸς τὴν Ἀγησιστράταν μετ’ ὀργῆς εἶπεν· “Εἰ τοίνυν” ἔφη, “ταῦτά ἐδοκίμαζες τῷ υἱῷ, ταῦτά καὶ πέισῃ.” Καὶ ἡ Ἀγησιστράτα πρὸς τὸν βρόχον ἀνισταμένη “Μόνον” ἔφη “συνενέγκαι ταῦτα τῇ Σπάρτῃ.”

B. For Juniors only :

A Traveller's Tale.

Καὶ μὴν καὶ ἄλλο θαῦμα ἐν τοῖς βασιλείοις ἐθεασάμην· κάτοπτρον μέγιστον κεῖται ὑπερφρέατος οὐ πάνυ βυθέος. ἂν μὲν οὖν εἰς τὸ φρέαρ καταβῇ τις, ἀκούει πάντων τῶν παρ’ ἡμῖν ἐν τῇ γῇ λεγομένων, εἰ δὲ εἰς τὸ κάτοπτρον ἀποβλέψῃ, πάσας μὲν πόλεις πάντα δὲ ἔθνη ὁρᾷ ὥσπερ ἐφεστῶς ἐκάστοις· τότε καὶ τοὺς οἰκείους ἐγὼ ἐθεασάμην καὶ πᾶσαν τὴν πατρίδα· εἰ δὲ κακῆνοιί με ἐώρων, οὐκ ἔχω τὸ ἀσφαλὲς εἰπεῖν. ὅστις δὲ μὴ πιστεύει ταῦτα οὕτως ἔχειν, ἂν ποτε καὶ αὐτὸς ἐκείσε ἀφίκεται εἴσεται ὡς ἀληθὴ λέγω. τότε δ’ οὖν ἀσπασάμενοι τὸν βασιλέα καὶ τοὺς ἀμφ’ αὐτὸν ἐμβάντες ἀνήχθημεν. ἐν δὲ τῷ παράπλῳ προσέσχομεν μεγάλην τι πόλιν ὄνομα Σίττη καὶ ἀποβίντες ὑπερυσάμεθα.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

GREEK TRANSLATION.

(Seniors and Juniors.)

1. Ζεὺς γὰρ μέγιστον τοῦτ’ ἐποίησεν κακόν,
γυναῖκας· ἦν τι καὶ δοκῶσιν ὠφελεῖν,
ἔχοντί τοι μάλιστα γίνονται κακόν.
οὐ γὰρ ποτ’ εὐφρων ἡμέραν διέρχεται
ἅπασαν, ὅστις σὺν γυναικὶ γίγνεται·
οὐδ’ αἶψα¹ λιμὸν οἰκίας ἀπώσεται,
ἐχθρὸν συνοικήτηρα, δυσμενὴ θεόν.
ἀνὴρ δ’ ὅταν μάλιστα² θυμηδεῖν δοκῇ,
εὐρούσα³ μῶμον ἐς μάχην σκευάζεται·
ὅπου γυνὴ γάρ ἐστίν, οὐδ’ ἐς οἰκίαν
ἄνδρες δέχονται προφρόνως ξένον ποτέ.

2. Ἦδη δὲ πρὸς τῷ¹ τελευτῶν ὄντος τοῦ Περικλέους, παρακαθήμενοι τῶν πολιτῶν οἱ βέλτιστοι καὶ τῶν φίλων οἱ περιόντες λόγον ἐποιοῦντο περὶ τῆς ἀρετῆς καὶ τῆς δυνάμεως, ὅση γένοιτο, καὶ τὰς πράξεις² ἀνεμετροῦντο καὶ τῶν³ τροπαίων τὸ πλῆθος· ἐννέα γὰρ ἦν ἡ στρατηγῶν καὶ νικῶν ἔστησεν ὑπὲρ τῆς πόλεως. ταῦτι δὲ, ὡς οὐκέτι⁴ συνιέντος, διελέγοντο πρὸς ἀλλήλους· ὁ δὲ κτείνων ἐτύγχανε τὸν νοῦν προσεσχηκώς, καὶ⁵ φθονοζαμένος εἰς μέσον ἔφη βαυμάζειν, ὅτι ταῦτα μὲν ἐπαινοῦσιν αὐτοῦ καὶ μνημονεύουσιν, ἃ

γέγονεν ἤδη πολλοῖς στρατηγοῖς, τὸ δὲ κάλλιστον καὶ μέγιστον οὐ λέγουσιν. “Οὐδεὶς γὰρ” ἔφη “δὲ ἐμὲ τῶν ὄντων Ἀθηναίων μέλαν ἱμάτιον περιέβαλετο.”

3. Χρυσὸν ἀνὴρ ὁ μὲν εὗρεν, ὁ δ' ὤλεσεν, ὃν ὁ μὲν εὐρών ρίψεν¹⁰, ὁ δ' οὐχ εὐρών λυγρὸν ἔδησε¹¹ βρόχον.

¹ soon

⁴ (μίμφομαι)

⁷ trophy

¹⁰ (= ἔρριψεν)

² hunger

⁵ die

⁸ understand

¹¹ noose

³ (ἡδύς)

⁶ (μέτρον)

⁹ speak

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—June, 1899.

GREEK TRANSLATION.

1. *Plutarch, Otho.*

Ἦδη δὲ ἐσπέρας οὔσης ἐδίψησε, καὶ πῶν ὀλίγον ὕδατος, δυοῖν ὄντων αὐτῷ ξιφῶν, ἑκατέρου κατεμάνθανε τὸ σπᾶσμα¹ πολὺν χρόνον, καὶ τὸ ἕτερον ἀπέδωκε, θύτερον δὲ εἰς τὰς ἀγκάλας ἀναλαβὼν τοὺς οἰκέτας προσεκαλεῖτο. Καὶ διένεμε τῶν χρημάτων τῷ μὲν πλεόν, τῷ δὲ ἐλαττον. Ἀποπέμψας δὲ τούτους ἤδη τὸ λοιπὸν ἀνεπαύετο τῆς νυκτός, ὥστε τοὺς κατευναστὰς² αἰσθάνεσθαι βαθέως αὐτοῦ καθεύδοντος. Ὀρθρου δὲ καλέσας ἀπελεύθερον³, “Ἴθι τοίνυν” ἔφη “σὺ, καὶ ποιεῖ τοῖς στρατιώταις ἐμφανῆ σεαυτόν, εἰ μὴ θέλεις κακῶς ὑπ’ αὐτῶν ἀποθανεῖν—ὥς ἐμο συμπράξας τὸν θάνατον.” Ἐξελθόντος δὲ τοῦ ἀνθρώπου, τὶ ξίφος ὑποστήσας ὀρθὸν ἀμφοτέραις ταῖς χερσὶ, καὶ περιπεσῶν ἄνωθεν, ὅσον ἄπαξ στενάξαι μόνον ἤσθετο τοῦ πόνου, καὶ τοῖν ἐκτὸς αἰσθῆσιν παρέσχεν. Ἀραμένων δὲ τῶν παίδων οἰμωγὴν εὐθὺς ἅπαν τὸ στρατόπεδον καὶ τὴν πόλιν ἐπέιχε κλαυθμός· καὶ μετὰ βοῆς οἱ στρατιῶται εἰσέπεσον ἐπὶ τὰς θύρας καὶ ὠλοφύροντο, λαιδοροῦντες ἑαυτοὺς μὴ φυλάξαντας τὸν αὐτοκράτορα μηδὲ κωλύσαντας ἀποθανεῖν ὑπὲρ αὐτῶν. Ἀπέστη δὲ οὐδεὶς τῶν κατ’ αὐτὸν, ἐγγὺς ὄντων τῶν πολεμίων, ἀλλὰ κοσμήσαντες τὸ σῶμα καὶ πυρὰν κατασκευάσαντες ἐξεκόμιζον.

¹ blade.

² chamberlains.

³ freedman.

2. *Sophocles, Philoctetes.*

NE. οὐδέν σε κρύψω. δεῖ γὰρ ἐς Τροίαν σε πλεῖν πρὸς τοὺς Ἀχαιοὺς καὶ τὸν Ἀτρειδῶν στόλον.
 ΦΙ. οἶμοι, τι εἶπας; NE. μὴ στέναζε, πρὶν μάθῃς.
 ΦΙ. ποῖον μάθημα; τί με νοεῖς δρᾶσαι ποτε;
 NE. σῶσαι κακοῦ μὲν πρῶτα τοῦδ’, ἔπειτα δὲ ξὺν σοὶ τὰ Τροίας πεδία πορθῆσαι μολῶν.
 ΦΙ. καὶ ταῦτ’ ἀληθῆ δρᾶν νοεῖς;
 NE. πολλὴ κρατεῖ τούτων ἀνάγκη· καὶ σὺ μὴ θυμοῦ κλύων.
 ΦΙ. ἀπόλωλα τλήμων, προδέδομαι. τί μ’, ὦ ξένη, δέδρακας; ἀπόδος ὡς τάχος τὰ τόξα μοι.
 NE. ἀλλ’ οὐχ οἶόν τε· τῶν γὰρ ἐν τέλει κλύειν τό τ’ ἐνδικόν με καὶ τὸ συμφέρον ποιεῖ.

GREEK PROSE.

1. This man says that he is blind, and, therefore, needs help : but do not give him anything, for I know that he is not speaking the truth.

2. If you had told me that you would not come till you heard from me, I should have written to you at once.

3. *Perseus and the Three Grey Sisters.*

Then one cried, "Give me the eye that I may see him"; and another, "Give me the tooth that I may bite him." But Perseus, when he saw that they were foolish and proud, and did not love the children of men, left off pitying them and said to himself, "Hungry men must needs be hasty; if I stay making many words here, I shall perish of hunger." Then he stepped close to them, and watched them passing the eye from hand to hand; and at last he held out his own hand gently, till one of them put the eye into it, fancying that it was the hand of her sister. Then he sprang back, and laughed, and cried—"Cruel and proud old women, I have your eye; and I will throw it into the sea, unless you tell me the path to the Gorgon, and swear to me that you tell me right."

WINCHESTER COLLEGE ELECTION—July, 1899.

GREEK TRANSLATION.

(For Boys under 13 years of age on 1st June, 1899.)

1. Translate :—

Τειχίσαντες δὲ χωρίον τι παρὰ τῷ ποτάμῳ εὐ κείμενόν τροπαῖον ἔστησαν, ὡς ἅπαντα τὰ περιχώρια νικήσαντες. στρατιωτῶν δὲ οἱ πολλοὶ ἐπιχώριοι ἦσαν, οἱ σύμμαχοι τοῖς Γάλλοις συνείποντο· ἡγεῖτο δὲ λοχαγὸς τις ἀνδρείος ὢν καὶ ἔμπειρος, ᾧ τὸ ὄνομα Ἔμπορος. ἀκούσας δὲ ὁ τῶν Αἰγυπτίων στρατηγός, νικηθείσης ἀρτὶ τῆς τῶν βαρβάρων στρατίας, ὅτι ξενοὶ τινες ἐν τούτῳ τῷ χωρίῳ, Αἰγυπτίῳ δὴ ὄντι, παρήσαν, αὐτὸς τὸν πόταμον ὡς ἐπταῖ ἡμέρας ὁδὸν ἀνέβη πευσόμενος τὸ γενόμενον. Εὐρὼν δὲ τοὺς Γάλλους καὶ τοὺς συμμάχους, οὐκ ἔφη ἐκὼν αὐτοὺς ἐκεῖ μένοντας περιόψεσθαι. βεβαίως δὲ ἀντέλεγεν ὁ Ἔμπορος ὡς οὐκ ἀναχωρήσων μὴ κελευσάντων τῶν ἐν τέλει τῆς τῶν Γάλλων πολιτείας.

2. Translate :—

Πῶσαι ποτ' ἐστὶ τοῦτ' ἐμοὶ δεδογμένον
ὁ μὲν δίκαιος τοῖς πέλας πέφυκ' ἀγῆρ,

ὁ δ' εἰς τὸ φαῦλον κέρδος ἀποβλέπων ἀεὶ
 πόλει τ' ἄχρηστος τοῖς τε συμμάχοις βαρὺς,
 αὐτῷ δ' ἄριστος· οἶδα δ' οὐ λόγῳ μαθὼν.
 ἐγὼ γὰρ αἰδῶ καὶ τὸ συγγενὲς σέβων,
 ἐξὸν κατ' Ἄργος ἡσυχῶς ναίειν, πόνων
 πλείστων μέτεσχον εἰς ἀνὴρ Ἡρακλέει,
 ὅτ' ἦν μεθ' ἡμῶν· νῦν δ' ἐπεὶ κατ' οὐρανὸν
 ναίει, τὰ κείνου τέκν' ἔχων ὑπὸ πτεροῖς
 σῶζω τάδ', αὐτὸς δεόμενος σωτηρίας.

GREEK TRANSLATION.

(For Boys 13 years of age before June 1st, 1899.)

1. Translate:—

Ἐλθόντων δὲ τῶν πρεσβευτῶν πρὸς τὸν Ἀντίοχον, ὁ βασιλεὺς
 ἀποδεξάμενος τοὺς ἄνδρας φιλανθρώπως, τὴν μὲν πρώτην ὑποδοχὴν
 αὐτῶν ἐποιήσατο μεγαλοπρεπῆ. κατὰ δὲ τὴν ἐξῆς λέγειν ἐκέλευσε
 περὶ ὧν ἔχουσι τὰς ἐντολάς. πρῶτον μὲν οὖν οἱ παρὰ τῶν Ἀχαιῶν
 ἐποιήσαντο λόγους, τούτοις δὲ ἐξῆς Δημίρατος ὁ παρὰ τῶν Ἀθη-
 ναίων, μετὰ δὲ τοῦτον Εὐδήμος ὁ Μιλήσιος. πάντων δὲ πρὸς τὸν
 αὐτὸν καιρὸν κατὰ τὴν αὐτὴν ὑπόθεσιν διαλεγόμενων, παρα-
 πλησίους εἶναι συνέβαινε καὶ τοὺς κατὰ μέρος αὐτῶν λόγους. τὴν
 μὲν γὰρ αἰτίαν τῶν συμβεβηκότων πάντες ἀνέφερον ἐπὶ τοὺς περὶ
 τὸν Εὐλαῖον· τὴν τε συγγένειαν καὶ τὴν ἡλικίαν τὴν τοῦ Πτολε-
 μαίου προφερόμενοι, παρητοῦντο τὴν ὀργὴν τοῦ βασιλέως. ταῦτ'
 οὖν εὐκαίρως εἶχε.

2. Translate:—

T. ἄταρ φράσον μοι, ποῦ 'σθ' ὁ Πλούτος;
 K. ἔρχεται.
 ἀλλ' ἦν περὶ αὐτὸν ὄχλος ὑπερφυῆς ὅσος.
 οἱ γὰρ δίκαιοι πρότερον ὄντες καὶ βίον
 ἔχοντες ὀλίγον αὐτὸν ἡσπάζοντο καὶ
 ἐδεξιοῦνθ' ἅπαντες ὑπὸ τῆς ἡδονῆς.
 ὅσοι δ' ἐπλούτουν οὐσίαν τ' εἶχον συχνήν,
 οὐκ ἐκ δικαίου τὸν βίον κεκτημένοι,
 ὀφρὺς¹ συνήγον ἐσκυθρόπαζον² θ' ἄμα.
 οἱ δ' ἠκολούθουν κατόπιν ἐστεφανώμενοι.

¹ eyebrow.² to look angry.

ETON COLLEGE ELECTION, 1899.—Thursday, 6th July, 7—9 a.m.

A and B.

FOR ELEGIACS.

The toilers of the sea.

No fish astir in our heaving net,
 The sky is dark and the night is wet;
 And we must ply the lusty oar,
 For the tide is ebbing from the shore.

And sad are they whose faggots burn,
 So kindly stored for our return.
 Our boat is small and the tempest raves ;
 And nought is heard but the lashing waves :
 Yet sea and tempest rise in vain,
 We'll bless our blazing hearths again.
 Push bravely, mates ; our guiding star
 Now from the turret streameth far :
 Before the midnight hour is past,
 We'll quaff our bowl and mock the blast.

FOR LYRICS.

After sorrow cometh joy.

Sweetly gleam the morning flowers
 When in tears they waken ;
 Earth enjoys refreshing showers,
 When the boughs are shaken.
 Stars shine forth, when night her shroud
 Draws as daylight fainteth ;
 Only on the tearful cloud
 God his rainbow painteth.

MARLBOROUGH COLLEGE SCHOLARSHIPS.—June, 1899.

LATIN VERSE.

*Juniors are recommended to read pieces (A) and (B) carefully
 before deciding which to do : they should attempt (A) if possible.
 Boys under 14 at the time of competition are not examined
 in Latin Verse.*

For Seniors.

Look ! look the spring is come :
 O feel the gentle air,
 That wanders through the boughs to burst
 The thick buds everywhere !
 The birds are glad to see
 The high unclouded sun :
 Winter is fled away, they sing,
 The gay time is begun.
 Adown the meadows green
 Let us go dance and play,
 And look for violets in the lane,
 And ramble far away.

For Juniors.

(A.)

MORNING.

Philomel forsakes the thorn,
 Plaintive where she prates at night,
 And the lark, to meet the morn,
 Soars beyond the shepherd's sight.

Now the pine-tree's waving top
 Gently greets the morning gale,
 Now the lambs begin to crop
 Daisies in the dewy dale.

Where the sweetest flowers lurk,
 Restless till her task be done,
 Now the busy bee's at work,
 Sipping dew before the sun.

(B.)

- (1) That, Muses, was a time happy beyond all
- (2) When (ut) Phyllis was present to me everywhere (ubique)
as companion.
- (3) A thousand joys thrill (pertento) my pleased breast :
- (4) When thus on the shepherd had kindly love shone ?
- (5) Now my Phyllis is away, and I am left desolate (desolatus):
- (6) How great changes (vices) do the cruel (improbis) fates
cause (dant) !
- (7) When the appearance (species) of things, which (was) most
beautiful, smiled
- (8) What once (modo) I believed (to be) the spring was Phyllis
to me.
- (9) The rivulet rejoiced to run down with quick wave,
- (10) And with gentle voice to raise (ciere) the dance among (ad)
the stones.
- (11) Were she only (modo) standing there (adsto) I call you to
witness, little Cupid,
- (12) Sweet were the murmurs of the water, sweet the beauty.
- (13) But now when she has gone away I stray weeping (flebilis)
over the bank :
- (14) I complain with unceasing accents (ore) while it murmur
(strepo) hard by.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

LATIN ELEGIACS.

[*You are advised not to spend too much time over a single couplet.*]

For Seniors.

The sun's descending in the west,
The evening star does shine;
The birds are silent in their nest
And I must seek for mine.

Farewell, green fields and happy grove,
Where flocks have ta'en delight.
Where lambs have nibbled, silent move
The feet of angels bright.

They look in every thoughtless nest
Where birds are covered warm;
They visit caves of every beast,
To keep them from all harm.

For Juniors.

The ox in time shall patient draw the plough,
And yield his neck to bear the curved yoke;
The mettled horse in time obeys the rein
And takes in quiet mouth the iron bit;
The rage of Punic lions time doth tame

Shall patient draw = becomes enduring of (patiens).

to bear = to be pressed by (premendus).

mettled = animosus rein = hābēnæ pl. bit = lūpi, pl.

time doth tame = by time is calmed (compescor).

Nor can their former fierceness still endure;
Time makes the grape with swollen clusters fill,
It wears the rock and wastes the adamant;
All things can age that ever glides away
With silent foot, diminish but my cares.

endure = maneo.

grape, ūva f. cluster, rācēmus grow full = tūmeo.

wear = tero adamant = ādāmāntā acc. sing. mas.

diminish = attēnūare.

For Seniors and Juniors if time allows.

It was a land of peace and flowers,
With valleys towards the sea—
A land of streams and singing birds,
Where never tempests be.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—May, 1899.

FOR LATIN ELEGIACS.

To land these two bold brethren leapt
 (The weary crew their vessel kept)
 And, lighted by the torches' flare,
 That seaward flung their smoky glare,
 The younger knight that maiden bare
 Half lifeless up the rock ;
 On his strong shoulder lean'd her head,
 And down her long dark tresses shed,
 As the wild vine, in tendrils spread,
 Droops from the mountain oak.
 Him follow'd close that elder Lord,
 And in his hand a sheathed sword,
 Such as few arms could wield ;
 But when he bound him to such task,
 Well could it cleave the strongest casque,
 And rend the surest shield.

WINCHESTER COLLEGE ELECTION.—July, 1899

For Boys under 13 years of age on 1st June, 1899

FOR LATIN ELEGIACS.

High in mid heaven the golden sun is seen,
 And all the field with vernal smiles is green ;
 The crowded school unwilling learners keeps ;
 Dull are the scholars, e'en their teacher sleeps.
 But welcome after toil comes sweet repose,
 Each grasps his ball (*trochus*) and books behind
 him throws.
 From all sides gathering, to the meads resort
 The noisy crew, and join their wonted sport.
 Part ply their limbs along the grassy plain,
 And all their comrades shout and cheer again :
 Part seek their inward cravings to assuage ;
 Some well known haunt dispels fell hunger's rage.
 Thrice happy they whose careless boyhood strays
 In one long round of bright unsullied days !

WINCHESTER COLLEGE ELECTION.—July, 1899.

For Boys 13 years of age before 1st June, 1899

FOR LATIN ELEGIACS.

The barrier of that iron shore,
 The rock's steep ledge, is soon climbed o'er ;
 And from the Castle's distant wall,
 From tower to tower the warders call

They gained the Chase, a wide domain
Left for the Castle's silvan reign;
For thence soft swept in velvet green
The plain with many a glade between,
Whose tangled alleys far invade
The depth of the brown forest shade.
Here the tall fern obscured the lawn,
Fair shelter for the sportive fawn;
There, tufted close with copsewood green
Was many a swelling hillock seen;
And all around was verdure meet
For pressure of the fairies' feet.

II.—ENGLISH, ETC.

ETON COLLEGE ELECTION, 1899.—Thursday, 6th July
10.30 a.m.—1 p.m.

GENERAL PAPER.

PART I.

Translate into English :—

1. Sur un écueil battu par la vague plaintive,
Le nautonier, de loin, voit blanchir sur la rive
Un tombeau, près du bord par les flots déposé;
Le temps n'a pas encore bruni l'étroite pierre,
Et, sous le vert tissu de la ronce et du lierre,
On distingue . . . un sceptre brisé.
Ici gît . . . point de nom ! demandez à la terre
Ce nom, il est inscrit, en sanglant caractère,
Des bords du Tanais au sommet du Cédar,
Sur le bronze et le marbre, et sur le sein des braves
Et jusque dans le cœur de des troupeaux d'esclaves,
Qu'il foulait tremblants sous son char.

2. Give the meaning of the following :—

- (α) Faire balai neuf, (β) brûler le pavé, (γ) à franc étrier,
(δ) le doigt sur la détente, (ϵ) un brave homme, (ζ) un homme
brave, (η) pêcher à la ligne, (θ) après lui il faut tirer l'échelle,
(ι) dormir sur les deux oreilles; and give the French for—Castles
in the air, he was at bay, point blank, a month ago, to cast
sidelong glances.

3. Give the English and feminine of—bienfaiteur, rous,
vengeur, bref, neuf, lequel, le leur, vieux, chacun; and con-
jugate in full the future and present subjunctive of—naître,
servir, croître, croire, faire,

PART II.

1. Write not more than 20 lines of prose, or a short epigram in English or Latin on *one* of the following :—

- (1) Arbitration.
- (2) Why is gambling wrong ?
- (3) Where ignorance is bliss, 'tis folly to be wise.
- (4) The half is greater than the whole.

2. Where are the following places, and for what is each famous—Elba, Marengo, Corunna, Ravenna, Sedan, Versailles, The Hague, Sebastopol, the Philippine Islands, Khartoum, Pylos, Mycale, Philippi, Pharsalia, Tibur, Baiæ ?

3. Give an account of *one* of the following :—

- (a) The Expedition of the Ten Thousand, its object, failure and retreat.
- (β) The civil war in England to the battle of Worcester.
- (γ) The campaign of Waterloo.
- (δ) A short account of the plot of *two* of the following works—Hamlet, Waverley, Ivanhoe, Comus, The Lady of the Lake, Treasure Island, King Solomon's Mines, with the names of the principal characters.

4. Explain the following, mentioning the persons of or by whom they were spoken :—

- (a) Varus, give me back my legions.
- (β) Beware of the Ides of March.
- (γ) He found the city brick and left it marble.
- (δ) His eye was not dim nor his natural force abated ?
- (ε) Who will rid me of this proud priest ?
- (ζ) We have this day lighted a fire in England which will never be put out.
- (η) He never said a foolish thing, and never did a wise one.
- (θ) England expects every man to do his duty.

5. Name as many as you can of the bodies making up the Solar System. How many were known to the Ancients ?

6. What is the cause of the change of the length of days at different times of the year ?

7. What are the causes of the trade winds ? Name the more important trade winds.

MARLBOROUGH COLLEGE SCHOLARSHIPS EXAMINATION.—

June, 1899.

GENERAL PAPER.

[Candidates may not do more than six questions—one from each of A, B, C, D, E, and one more from any of these sections. Each question must be written on a separate sheet.]

A.

1. Give instances to show how the Jewish Prophets helped to teach religion and morality.
2. A few words about Melchisedec—Balaam—Esau—Gideon—Elisha—Enoch—Babylon—Jonah; in what connection are they severally mentioned in the New Testament?

B.

3. "Jesus, the Son of God . . . was in all points tempted like as we are." Quote facts or passages of Scripture to illustrate this.
4. Give not more than five lines on each of the following:—Nicodemus—St. Philip—St. Barnabas—St. Luke—St. Thomas—St. Michael.

C.

5. Why does King Alfred specially deserve to be called "the Great"?
6. For what reasons is the memory of Oliver Cromwell held in honour by many?
7. A few words on Stephen Langton—Nelson—Pym—Sir Thomas More—Sir Isaac Newton—the Duke of Wellington.

D.

8. Write a short essay on *one* of these:—
 - (a) The advantages of public school education.
 - (b) Why is it good for boys to read and learn poetry?
 - Or (c) Recall or invent a short narrative to illustrate Heroism.
9. Give some account of the following:—
 - "Marmion"—Tennyson's "Passing of Arthur"—Shakespeare's "As You Like It"—Scott's "Talisman"—"The Pilgrim's Progress"—Dickens' "Tale of Two Cities."

E.

10. Draw an outline map of Italy and Sicily, or India, showing the position of *Ravenna*—*Venice*—Brindisi—Palermo—the

Arno—Mantua—Genoa—and six other places ; *or*, of Benares—Agra—Lucknow—Simla—Colombo—Hyderabad—the Hooghly—Peshawur—and six other places. What is, or was, the importance of those italicised ?

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

GENERAL PAPER.

I. With what historical events are the following dates connected : B.C. 510, 404, 338, 263, 44 ; A.D. 622, 1099, 1215, 1429, 1801 ?

II. Mention two works of each of the following writers :—Euripides, Vergil, Pope, Goethe, Ruskin.

III.—(a.) Where are the following places :—Delagoa Bay, Nyassa, Manila, Munich, Odessa ?

(b.) Draw a map of Ireland, or of Italy.

IV. Fill up the following lines :—

- (a.) 1. Stop ! for thy tread is on an dust !
 2. I am distressed for thee, my brother .
 3. "Down with him," quoth false .
 4. And justify the ways of .
 5. Take up the white man's .

(b.) Name the writer or speaker in each case.

V. Write an essay on the present condition of France, Russia, or Africa.

[*N.B.*—Only one subject to be attempted.]

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—June, 1899.

GENERAL PAPER.

(Do not attempt more than six questions.)

1. Give an account of
 either The Conquest of Canaan by Joshua.
 or St. Paul's First Missionary Journey.
2. Who was the best, and who was the worst of the Kings of Israel and Judah ? Give your reasons.
3. Name the author of the following works :
 Il Penseroso : Don Quixote : The Recessional : The Eclogues : The Apology : The Canterbury Tales : Gulliver's Travels : Alexander's Feast : The Black Dwarf : The Revenge.

4. What do you know of
Caliban: Mark Tapley: Molière: Arthur Hallam: Slatin
Pasha?
5. Sketch the career of Julius Caesar or Oliver Cromwell.
6. What did Marlborough and Wellington do for England?
Which rendered her the greatest service? What qualities
necessary to a great general did each of them possess?
7. Mention the chief discoveries and inventions of the last
fifteen years. Give a very short description of each.
8. Explain briefly the lake system of North America. Illustrate
your account with a rough map.
9. What additions have been made to the British Empire in
the present reign? Which of these do you consider the most
valuable, and why?
10. What do you know of the haunts and habits of the swallow,
the beaver, the salmon?

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—May, 1899.

FOR AN ENGLISH ESSAY.

Write on *one* of the following subjects:—

1. How far is universal peace desirable or possible?
2. The pleasure and advantage to be gained by the observa-
tion of nature.
3. Compare the value of novel reading with that of poetry
as part of the education of the mind.

WINCHESTER COLLEGE ELECTION.—July, 1899.

For Boys under 13 years of age on 1st June, 1899.

- N.B.*—1. *No boy may attempt more than six Questions altogether.*
2. *Every boy must answer at least two Questions in each
part of the paper.*
3. *The Answers on History and Geography are to be kept
separate, and shewn up as separate papers.*

HISTORY.

[*Give dates, at any rate approximatety, where you can.*]

I. State shortly what you know of any three out of each of the
following groups:—

1. Margaret of Anjou, Drake, Strafford, Clive, Sir Robert
Walpole.
2. Warwick the Kingmaker, Thomas Cromwell, John Wesley,
Hawke, Sir Robert Peel.

II. When was Parliament established in England? What were the reasons for its establishment? At what times has it been most powerful?

III. What do you know of any four of the following:—The Constitutions of Clarendon—The Field of the Cloth of Gold—The Long Parliament—The Declaration of Independence—The South Sea Bubble—The Gordon Riots—The Act of Union?

IV. What events led up to the flight of James II.? By what right did his successor come to the throne?

V. For what are the following places famous:—Flodden, Newbury, Malplaquet, Aboukir Bay, Talavera, Lucknow?

VI. Show by a genealogical tree the relationships of the Monarchs of England from George I. to Queen Victoria; and mention some of the most famous of the other members of the family, stating for what they are famous.

GEOGRAPHY.

I. What is meant by:—A spring tide—a monsoon—an anti-cyclone—a coral reef—the Maelstrom?

II. Draw a rough map of Northamptonshire and the counties that touch it. Name two towns in each county.

Or,

Draw a map of the southern half of Africa.

III. Where and what are the following:—The Hebrides—the Dardanelles—the Philippines—the Cotswolds—the Bahamas—the Goodwins?

IV. What do you know of:—Rio Janeiro—Montreal—the Volga—Lough Foyle—Cape St. Vincent?

V. What are the chief industries of:—Sheffield—Luton—Belfast—Johannesburg—South Wales?

WINCHESTER COLLEGE ELECTION.—July, 1899

For Boys 13 years of age before 1st June, 1899.

N.B.—1. No boy may attempt more than six Questions altogether.

2. Every boy must answer at least two Questions in each part of the paper.

3. The Answers on History and Geography are to be kept separate, and shewn up as separate papers.

HISTORY.

[Give dates, at any rate approximately, where you can.]

I. State shortly what you know of any three in each of the following groups:—

1. Margaret of Anjou, Drake, Pym, Rodney, Lord Palmerston.
2. Warwick the Kingmaker, Monk, John Wesley, Canning, Darwin.

II. How did Henry VIII., Elizabeth, and Archbishop Laud, change the character or position of the Church in England?

III. What do you know of any four of the following:—The Constitutions of Clarendon—The Lollards—Poyning's Act—The Declaration of Independence—The Gordon Riots—The South Sea Bubble—The Act of Union—The Test Act—Imperial Federation?

IV. What events led up to the flight of James II., and by what right did his successor come to the throne?

V. For what events are the following places famous:—Flodden—Newbury—Bunker's Hill—Plassey—Malplaquet—Quiberon Bay—Talavera—Lucknow?

VI. What are the chief Colonies of the British Empire? When, and under what circumstances, did they become British?

GEOGRAPHY.

I. What countries are the chief producers of wheat, coal, gold, petroleum, timber, claret, sugar?

II. Draw a rough map of Northamptonshire and the counties that touch it, marking two towns in each county.

Or,

Draw a map of the Southern half of Africa.

III. Where are the countries in which the following people live, and what do you know of them:—The Finns—The Maories—The Kaffirs—Sikhs—Uitlanders—Kurds?

IV. What do you know of the following:—Perth—Bloemfontein—Cape Verd—Bangkok—The Shannon—Tunis?

V. Give the names and relative positions of the chief islands or groups of islands, in the Pacific Ocean.

WINCHESTER COLLEGE ELECTION.—July, 1899.

DIVINITY.

[*N.B.*—In assigning marks to this paper, consideration will be paid to the age of the candidates.]

I. Explain, or show on a map, the situation of Bethhoron, Hebron, Jericho, Megiddo, Shechem, Zarephath; and give at least one historical fact connected with each.

II. Who were Abner, Athaliah, Caleb, Ezra, Herod Antipas, Barnabas? Give at least *one* historical fact in connection with each.

III. Explain the following expressions:—The Law and the Prophets, the Psalms of David, the Pentateuch, the Synoptic Gospels, the Pastoral Epistles.

IV. Write a short account of either (1) the journeyings of Abraham down to his settlement at Hebron, *or* (2) the wanderings of David in flight from Saul.

V. Who were Scribes, Pharisees, Herodians? Mention any special occasion upon which they respectively came into contact or collision with our Lord.

VI. Give an account of St. Paul's *second* missionary journey. Who accompanied him?

VII. How does the Revised Version bring out the meaning of the following passages?

1. No man putteth new wine into old *bottles*.
2. Wist ye not that I must be *about my Father's business*?
3. He closed the book and gave it to *the minister*, and sat down.
4. He beheld a publican named Levi sitting at the *receipt of custom*.

Mention any other passage in which the Revised Version is clearer or more accurate than the Authorised Version.

MARLBOROUGH COLLEGE SCHOLARSHIPS EXAMINATION.—

June, 1899.

Translate:—

I. Un ambassadeur anglais à Naples avait donné une fête charmante, mais qui n'avait pas coûté bien cher. On le sut, et on partit de là pour dénigrer sa fête, qui avait d'abord beaucoup réussi. Il s'en vengea en véritable Anglais et en homme à qui les guinées ne coûtaient pas grand'chose. Il annonça une autre fête. On crut que c'était pour prendre sa revanche, et que la fête serait superbe. On accourut. Grande affluence. Enfin on apporte un réchaud à l'esprit-de-vin. On s'attendait à quelque miracle. 'Messieurs, dit-il, ce sont les dépenses et non l'agrément d'une fête que vous cherchez: regardez bien (et il entr'ouvre son habit dont il montre la doublure), c'est un tableau Dominiquin, qui vaut cinq mille guinées; mais ce n'est pas tout: voyez ces dix billets: ils sont de mille guinées chacun, payables à vue sur la banque d'Amsterdam. (Il en fait un rouleau, et les met sur le réchaud allumé.) Je ne doute pas messieurs, que cette fête ne vous satisfasse, et que vous ne vous retiriez tous contents de moi. Adieu, messieurs, la fête est finie.'

NICOLAS CHAMFORT.

II. Que l'on choisisse le plus grand homme du monde, et qu'on lui donne un esprit assez étendu pour contempler tout à la fois cette variété de jugements qu'on porte sur lui, et pour jouir pleinement de tout le spectacle des pensées et des mouvements qu'il excite dans les autres : il n'y a point de vanité qui puisse subsister à cette vue. Pour un petit nombre de jugements avantageux, trop souvent dictés par la flatterie, il en verroit une infinité qui lui déplairoient. Il verroit que les défauts qu'il se dissimule, ou qu'il ne connoît point, sautent aux yeux de la plupart des gens ; que souvent ils ne s'entretiennent d'autre chose, et qu'on ne le regarde que par cet endroit. Il verroit que le monde est très-peu touché de toutes ces belles qualités dont il se flatte ; que les uns ne les voient seulement pas les autres les regardent avec froideur : que de tout cela il se forme un portrait qui n'est propre qu'à faire mourir son orgueil.

PIERRE NICOLE.

1. Give the plural of: *bal*—*vitrail*—*trou*—*cou*—*régul*—*détail* ; and the feminine of: *épais*—*berger*—*pêcheur*—*clos*—*complet*—*apprenti*.

2. Write out in full the 3rd person of the conjunctive and disjunctive personal pronouns. When is the disjunctive dative used as the remote object of a verb ?

3. Give 1st pers. sing. of future of: *venir*—*envoyer*—*voir*—*courir*.

Give the 3rd pers. sing. of preterite of: *conduire*—*venir*—*vivre*—*écrire*.

Give the 3rd pers. plural of pres. subj. of: *pouvoir*—*savoir*—*vouloir*—*connaître*.

4. Put into French :—

What are you saying ?—Which of those houses have you bought ?—He is always talking to me, but I pay no attention to him.—Whom do you love best ?—I shall get my books sold.—He is taller than I am, but not so tall as she.—I have bought everything I wished.—Put it here, do not give it to them.—More than 200 soldiers have been killed.—I have not drunk wine for 19 years.—He has bought himself some books and given some to me.—That little French girl is only 13 years old.

MARLBOROUGH COLLEGE SCHOLARSHIP EXAMINATION.—June, 1899.

MODERN SCHOOL.—FRENCH PROSE.

(For Seniors only.)

A doubt has been raised—whether animals ever commit suicide ; to me it is obvious that they do not, and cannot. Some years ago, however, there was a case reported in all the news-

papers of an old ram (*belier*) who committed suicide (as it was alleged) in the presence of many witnesses. Not having any pistols or razors, he ran for a short distance, in order to aid the impetus (*impulsion*) of his descent, and leaped over a precipice, at the foot of which he was dashed to pieces. But, for my part, I doubted the accuracy of the report. Not long after a case occurred in Westmorland which strengthened my doubts. A fine young horse, who could have no possible reason for making away with himself, unless it were the high price of oats at the time, was found one morning dead in a field. The case was certainly a suspicious one: for he was lying by the side of a stone-wall, the upper part of which wall his skull had fractured, and which had returned the compliment by fracturing his skull. It was argued, therefore, that in default of ponds, etc., he had deliberately hammered with his head against the wall; this, at first, seemed the only solution: and he was generally pronounced *felo de se*.

DE QUINCEY.

(For Juniors only.)

There, with his eyes closed, and whiter than the pillows which supported his head, lay the little Dauphin. He was thought to be asleep when suddenly he turned to his mother and, seeing her tears, said to her softly "Madame, why do you weep? Do you really think like the rest of them that I am going to die?" The Queen tried to answer but her sobs prevented her from speaking. "Do not weep, Madame; you forget that I am the Dauphin and that Dauphins cannot die in this way." The Queen sobbed still more loudly and the little prince began to get frightened. "Stop," he exclaimed, "I will prevent Death from coming here to take me. Have forty stout fellows called in immediately to mount guard around our bed and let a hundred cannon remain night and day under our windows and woe to Death if He dares to come near us!" The Queen made a sign. At once big cannon were heard rolling in the courtyard and forty old soldiers with grey moustaches entered and placed themselves round the room. The little Dauphin clapped his hands on seeing them and, recognizing one of them, called out to him, "I am very fond of you, old Lorrain,—if Death wants to take me He must be slain, mustn't He?" "Yes indeed, sire," replied the old soldier, as two big tears trickled down his wrinkled face.

From A. DAUDET.

(For Seniors and Juniors.)

"What, can you speak French, too, Harry?" Asks Mr. Wolfe. The young man looked at the General with eager eyes.

"Yes," said he, "I can speak, but not so well as George."

"But he remembers the city, and can place the batteries, you see, and knows the ground a thousand times better than I do?" cries the elder brother.

The two elder officers exchanged looks with one another; Mr. Lambert smiled and nodded, as if in reply to the mute queries of his comrade; on which the other spoke. "Mr. Harry," he said, "if you have had enough of fine folks, and horse racing"—

"Oh, sir!" says the young man, turning very red.

"And if you have a mind to a sea-voyage at a short notice, come and see me at my lodgings to-morrow."

What was that sudden uproar of cheers which the ladies heard in their drawing room? It was the hurrah which Harry Warrington gave when he leaped up at hearing the General's invitation.

THACKERAY.

MARLBOROUGH COLLEGE SCHOLARSHIPS EXAMINATION.—
June, 1899.

FRENCH GRAMMAR.

I. Account for the double gender of: *fourbe—merci—ombre—vapour—voile*.

II. Explain (and illustrate if necessary by short examples) the difference between the meanings of: *le ciseau, les ciseaux—fatigant, fatigant—le poêle, la poêle, le poil—sur tout, surtout*.

III. State the principles which govern the position of adjectives. Give examples.

IV. Explain the uses of the imperfect, preterite, and past indefinite.

V. Give the 3rd sing., present subj., and the past participles of: *rompre—vaincre—avoir—clore—instruire—s'asseoir—nuire—absoudre*.

VI. Correct if necessary, and explain your corrections:—

- (1) Elle s'était attendu à mieux que cela.
- (2) À moins qu'il pleut, nous jouerons cet après-midi.
- (3) Ces tours qu'on avait toujours vus admirer et toujours vu rester fermes ont été démolis d'un coup de foudre.
- (4) Il a vu la jeune fille que son fils avait mariée.

VII. Translate into idiomatic French:—

- (1) This is no laughing matter.
- (2) He laughed in my face.
- (3) Better late than never.
- (4) I nearly missed my train.
- (5) I expect you to do it.
- (6) He took good care not to come.

GERMAN GRAMMAR.

I. Give the genitive sing. and nom. plur. of: *der Mann—der Fuß—der Wurm—die Absicht—das Band—der Bauer—das Paar—der Fels—der General—der Monat.*

II. Form verbs from: *ja—genug—ach—stark.*

III. Give the principal parts of: *regieren—frühstücken—übersetzen—veranstalten—bieten—beten—bitten.*

IV. Give examples of the cases governed by: *statt—aus—auf—in—während—über.*

V. Translate into *idiomatic* German:—

- (1) Of course I am sorry about it.
- (2) How is your brother? It is a long time since he has written.
- (3) Do not be offended if we laugh at you; it is your own fault.
- (4) Mind your own business.
- (5) I have had to refuse his invitation.
- (6) His hair stood on end.
- (7) Will you come with me?
- (8) He had been punished, because he had become lazy.

MARLBOROUGH COLLEGE SCHOLARSHIPS EXAMINATION.—
June, 1899.

MODERN SCHOOL.

(For Seniors only.)

LA CATHÉDRALE.

I.

Ma voix, entendez-vous ma voix qui gronde, ma voix qui bourdonne? Je dormais accroupie sous mon manteau de pierre. Orgue aux tuyaux faits dans le ciel, bel orgue, que me veux-tu? Pourquoi m'enivres-tu de tes cris comme d'une coupe du vin du Rhin? Mes cloches et mes clochetons tremblotent, mes vitres frissonnent, mes pieds chancellent sous la grêle et le vent de tes chants. Allons, mes saints de pierre; allons, mes saints de vermillon assoupis sur mes vitraux, debout! Entendez-vous? Allons, mes vierges de granit, chantez dans vos niches en tournant vos fuseaux. Allons aussi, mes griffons qui portez mes piliers sur vos têtes, ouvrez vos gueules. Allons, mes serpents, mes colombes de marbre qui vous pendez aux branches de mes voûtes! Allons, mes rois chevelus, qui rêvez le long de mes galeries sur vos chevaux caparaçonnés dans un roc des Vosges!

Taillez, navrez, éperronez leurs flancs, déchiquetez leurs croupes, brisez vos sceptres de granit sur leurs poitrails et leurs crinières de granit, tant que la pierre hennisse, tant qu'au loin, à l'entour, les cavales des Vosges demandent à leurs maîtres dans l'étable : Maître, maître, où vont les chevaux de pierre qui hennissent ? où vont les cavaliers de pierre qui montent à cette heure au galop, dans les tours, jusqu'au bord des nuages ?

EDGAR QUINET.

(For Juniors only.)

Des sentiments plus doux s'attachaient aussi au bruit des cloches. Lorsque, avec le chant de l'alouette, vers le temps de la coupe des blés, on entendait, au lever de l'aurore, les petites sonneries de nos hameaux, on eût dit que l'ange des moissons, pour réveiller les laboureurs, soupirait, sur quelque instrument des Hébreux, l'histoire de Séphora ou de Noémi. Il nous semble que si nous étions poète, nous ne dédaignerions point cette cloche agitée par les fantômes dans la vieille chapelle de la forêt, ni celle qu'une religieuse frayeur balançait dans nos campagnes pour écarter le tonnerre, ni celle qu'on sonnait la nuit, dans certains ports de mer, pour diriger le pilote à travers les écueils. Les carillons des cloches, au milieu de nos fêtes, semblaient augmenter l'allégresse publique ; dans des calamités, au contraire, ces mêmes bruits devenaient terribles. Les cheveux dressent encore sur la tête au souvenir de ces jours de meurtre et de feu, retentissant des clameurs du tocsin. Qui de nous a perdu la mémoire de ces hurlements, de ces cris aigus, entrecoupés de silences, durant lesquels on distinguait de rares coups de fusil, quelque voix lamentable et solitaire, et surtout le bourdonnement de la cloche d'alarme, ou le son de l'horloge qui frappait tranquillement l'heure écoulée ?

AUGUSTE DE CHATEAUBRIAND.

(For Seniors and Juniors.)

THE WATCH AND THE SUN DIAL.

Un jour la montre au cadran insultait,
Demandant quelle heure il était.
— Je n'en sais rien, dit le greffier solaire.
— Eh ! que fais-tu donc là, si tu n'en sais pas plus ?
— J'attends, répondit-il, que le soleil m'éclaire ;
Je ne sais rien que par Phœbus.
— Attends-le donc, moi je n'en ai que faire,
Dit la montre ; sans lui, je vais toujours mon train.
Tous les huit jours, un tour de main :
C'est autant qu'il m'en faut pour toute ma semaine.
Je chemine sans cesse, et ce n'est point en vain
Que mon aiguille en ce rond se promène.
— Ecoute ; voilà l'heure . . . Elle sonne à l'instant :

Une, deux, trois et quatre. Il en est tout autant,
 Dit-elle. Mais, tandis que la montre décide,
 Phœbus, de ses ardents regards,
 Chassant nuages et brouillards,
 Regarde le cadran, qui, fidèle à son guide,
 Marque quatre heures et trois quarts.
 — Mon enfant, dit-il à l'horloge,
 Va-t'en te faire remonter.
 Tu te vantes, sans hésiter,
 De répondre à qui t'interroge :
 Mais qui t'en croit peut bien se mécompter :
 Je te conseillerais de suivre mon usage :
 Si je ne vois bien clair, je dis : 'Je n'en sais rien.'
 Je parle peu, mais je dis bien.
 C'est le caractère du sage.

DE LA MOTTE HOUDART.

MARLBOROUGH COLLEGE FOUNDATION SCHOLARSHIPS.—

June, 1899.

Only Juniors are allowed to use Dictionaries.

GERMAN UNSEEN

I. Translate :—

Es gefällt uns so wohl, es schmeichelt so sehr, wenn wir einen Helden sehen, der durch sich selbst handelt, der liebt und haßt, wenn es ihm sein Herz gebietet, der unternimmt und ausführt, alle Hindernisse abwendet und zu einem großen Zwecke gelangt. Geschichtschreiber und Dichter möchten uns gerne überreden, daß ein so stolzes Loos dem Menschen fallen könne. Hier¹ werden wir anders belehrt; der Held hat keinen Plan, aber das Stille ist planvoll. Hier wird nicht etwa nach ein starv und eigensinnig durchgeführten Idee von Rache ein Bösewicht bestraft, nein, es geschieht eine ungeheure That, sie wälzt sich in ihren Folgen fort, reißt Unschuldige mit; der Verbrecher scheint dem Abgrunde, der ihm bestimmt ist, ausweichen zu wollen und stürzt hinein, eben da, wo er seinen Weg glücklich anzulaufen gedenkt. Denn das ist die Eigenschaft der Greuelthat, daß sie auch Böses über den Unschuldigen, wie der guten Handlung, daß sie viele Vortheile auch über den Unverbienten ausbreitet, ohne daß der Urheber von beiden oft weder bestraft noch belohnt wird.

¹ In Hamlet.

II. Translate :—

- (1) Wohlauf, wohlauf, über Berg und Fluß
 Dem Morgenrot entgegen,
 Dem treuen Weib den letzten Kuß,
 Und dann zum treuen Degen!
 Bis uns're Hand in Asche sticht,
 Soll sie vom Schwert nicht lassen;
 Wir haben lang' genug geliebt
 Und wollen endlich hassen!

- (2) Die Liebe kann uns helfen nicht,
Die Liebe nicht erretten;
Halt' du, o Haß, dein jüngst Gericht,
Brich du, o Haß, die Ketten!
Und wo es noch Tyrannen giebt,
Die laßt uns fest erfassen;
Wir haben lang' genug geliebt
Und wollen endlich hassen!
- (3) Wer noch ein Herz besitzt, dem soll's
Im Hasse nur sich rühren;
Überall ist dürres Holz,
Um uns're Blut zu schüren.
Die ihr der Freiheit noch verbleibt,
Singt durch die deutschen Straßen:
„Ihr habet lang' genug geliebt,
O lernet endlich hassen!“
- (4) Bekämpfet sie ohn' Unterlaß,
Die Tyrannei auf Erden,
Und heiliger wird unser Haß,
Als uns're Liebe werden.
Bis uns're Hand in Asche stiebt,
Soll sie vom Schwert nicht lassen;
Wir haben lang' genug geliebt
Und wollen endlich hassen!

III. Translate :—

Der König. Dann Eversmann.

- R.: Fort sind sie! Endlich einen Augenblick für mich allein.
E. (tritt ein.)
R.: Ich bin übermenschlich glücklich.
E.: Gratuliere unterthänigst.
R.: Danke. Ja, denk' Er sich — ja so — (beiseite) niemand soll's ja wissen. Zieh' Er mir den Rock aus. Nichts soll gespart werden. Man soll wissen, daß ich einen Schatz habe; man soll wissen, daß ich nur gewöhnlich geizig bin (herausplatzend) denk' Er sich, Eversmann — (besinnt sich wieder) ja so!
E. (zieht dem König den Rock aus): Majestät werden doch wohl die gestickte Uniform anziehen?
R.: Die gestickte Uniform. Ja, ich erwarte Gäste, denen man Ehre erzeigen muß, große Ehre; — (setzt sich). Zieh' Er mir die Stiefel aus.
E. (sticht sich dazu an. Es geht schwer.)
R.: War der Erbprinz schon da?
E.: Machen Se. Majestät seinetwegen so viel Umstände?
R.: Seinetwegen? Vielleicht! (Beiseite.) Ich will sie alle irreführen.
(Laut): Au, Flegel, meine Hühneraugen! Ich glaube gar, Er will mir absichtlich wehe thun, weil Ich — Ihm nichts sage?
E.: Majestät, ich habe ja noch gar nicht gefragt!
R.: Ich würd' Ihn auch bei Fragen! Warum lacht Er denn?
He? Hol' Er mir meinen Schlafrock, bis die Uniform da ist —
E. (will hineingehen.)

R.: Heida! warum hat Er vorhin gelacht?

E.: Ach — bis ich Ew. Majestät den Hut in die Hand gegeben habe, haben Sie mir's doch gesagt.

E. (droht ihm mit dem Stod): Was? Er untersteht sich?

R. (retirierend): Es muß ja alles heraus bei Ew. Majestät. Es giebt bloß eins, was Ew. Majestät gut bei sich behalten können, das ist das Geld — Ha, ha! Ich hole den Schlafrod. (Ab.)

MARLBOROUGH COLLEGE FOUNDATION SCHOLARSHIPS.—

June, 1899.

Only Juniors are allowed to use Dictionaries.

GERMAN PROSE.

It was at Lyons that the conspirators had proposed to effect the downfall of the great Cardinal: at Lyons Richelieu, who loved to sport thus in the face of fortune, had had Cinq-Mars and his friend de Thou confined. None of the townsfolk knew of their presence in the castle; and their trial and condemnation were conducted in equal secrecy. As the judges retired, the Abbé Quillet, who was present, seized a hand of each of his two friends. "Listen to me, both of you," he said to them. "The conspirators have all arrived. They want to strike a sudden blow to save you. The moment chosen is that when you will be conducted to punishment; the signal, your hat, which you must put on your head when they are to commence. The Queen, too, adjures you to save yourself, were it only out of pity for her, to whom you would leave eternal remorse." "And did no one else speak to you of me?" "No one." "If she had only written to me!" said Cinq-Mars in a low voice.

In the Place des Terreaux a scaffold seven feet high and about nine feet square had been erected. Troops were drawn up before the crowd, but every soldier had at his side a man hired to stab him. Cinq-Mars ascended the scaffold. "What is Monsieur doing?" asked a monk of the soldier nearest him: "has he his hat on his head?" "He has thrown it on to the ground," answered the man quietly.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

FRENCH PAPER.

I. Translate into English:—

Parmi les nations que Bonaparte traîne après lui, la seule qui mérite de l'intérêt, ce sont les Polonais. Je crois qu'ils savent aussi bien que nous qu'ils ne sont que le prétexte de la guerre.

et que l'Empereur ne se soucie pas de leur indépendance. Il n'a pu s'abstenir d'exprimer plusieurs fois à l'empereur Alexandre son dédain pour la Pologne, par cela seulement qu'elle veut être libre; mais il lui convient de la mettre en avant contre la Russie, et les Polonais profitent de cette circonstance pour se rétablir comme nation. Je ne sais s'ils y réussiront, car le despotisme donne difficilement la liberté, et ce qu'ils regagneront dans leur cause particulière, ils le perdront dans la cause de l'Europe. Ils seront Polonais, mais Polonais aussi esclaves que les trois nations dont ils ne dépendront plus. Quoi qu'il en soit, les Polonais sont les seuls Européens qui puissent servir sans honte sous les drapeaux de Bonaparte. Les princes de la confédération du Rhin croient y trouver leur intérêt en perdant leur honneur: mais l'Autriche par une combinaison vraiment remarquable y sacrifie tout à la fois son honneur et son intérêt. L'empereur Napoléon voulait obtenir de l'archiduc Charles de commander ces trente mille hommes: mais l'archiduc s'est heureusement refusé à cet affront: et quand je le vis se promener seul, en habit gris, dans les allées du Prater, je retrouvai pour lui tout mon ancien respect.

II. (1) Give the feminine of: — Polonais — empereur — Européen — archiduc — prince; and account for the gender of: — nation — prétexte — liberté — despotisme — honneur.

(2) Difficilement — vraiment — heureusement; explain the formation of these adverbs, and give the adverbs corresponding to the adjectives: indépendant — libre — particulier — tout — ancien.

(3) Conjugate in full the present indicative, future and imperfect subjunctive of: — savent — crois — obtenir — puissent — se promener; and the present subjunctive of voulait.

(4) Parse each word of the following sentence: — mais il lui convient de la mettre en avant contre la Russie.

(5) Give a list of the disjunctive personal pronouns. Explain the use of 'ceci' and 'cela.' When 'en' and 'y' occur in the same sentence, how are they placed?

(6) 'Qui puissent servir.' Why is 'puissent' in the subjunctive? When is the subjunctive used in a principal clause? Give an example.

III. Translate into French:—

DOVER, 2nd July.

MY DEAR JACK,—

I have often spoken to you about my schoolfellow, Ernest; I have told you how fond he is of me, and how much I am attached to him. You have more than once expressed a wish to make his acquaintance; very well, I am sending him to you; his parents are about to leave Dover and to live at Bath. Receive him as you would me, if I could get permission to go and see you. Everything you do for him, I

shall consider as having been done for myself. Besides, when once you know him, you will thank me having given you so devoted a friend. I therefore introduce him to you with perfect confidence, and feel convinced that you will make his stay (*séjour*), in a town where he does not know anybody yet, as pleasant as possible. Good-bye.

Your affectionate friend,
SAM.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

GERMAN PAPER.

1. Translate into English :—

Ein Fremder geht durch die Straßen Wiens. An einem frisch-geputzten Hause sieht er oben über dem zweiten Stockwerke einen dicken schwarzen Strich. Er bleibt stehen und überlegt, was für eine Bedeutung der Strich haben könne. Der Besitzer des Hauses, ein wohlgenährter Bäcker, steht an der Thür und fragt: „Nun was schaut der Herr? Sie möchten wohl gern wissen, was der Strich zu bedeuten hat? Der Strich zeigt an, wie hoch die Donau bei der letzten Ueberschwemmung gestanden hat.“ „Was?“ ruft der Fremde, „bis dahin? das ist unmöglich! Ganz Wien wäre dann verloren gewesen!“ „Ach,“ sagte der Bäckermeister ärgerlich, „die Leute wollen das nicht begreifen: der Strich war sonst hier unten, aber da habe ich ihn da oben angebracht. Da werden ihn die Bengel wohl stehen lassen müssen.“

2. Write out the genitive singular and nominative plural of:
der Bauer—die Magd—der Kopf—der Bart—das Pferd—die Stelle—
das Haus—der Fuchs—das Kalb—die Belohnung—das Schloß—der
Herr—der Edelmann—der General.

3. Give the present and imperfect of the indicative of:
stehen—geben—machen—müssen—können—werden—haben—reden—
erhalten—schreiben.

4. What cases follow the prepositions: auf—bei—innerhalb—
gegen—entgegen—ohne—über—hinter?

5. What verbs do not require *zu* before an infinitive dependent
on them?

6. What is the position of a verb depending on each of the
following conjunctions: da—weil—denn—daher—wenn—doch—
also—nachdem?

7. Translate into German :—

- (1) We have not been able to read his letter.
- (2) I know all that he said.
- (3) To whom do you speak?
- (4) The nights are longest in winter.
- (5) Is that your pen? No, it is hers.

- (6) Is your daughter at home? No, she has gone to the town.
- (7) We have not been allowed to go out. May I ask why not?
- (8) I should indeed like to see him, if I could; but where shall I find an opportunity?

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—May, 1899.

FRENCH DICTATION AND TRANSLATION.

1. DICTATION :

(To be collected at once).

2. Translate :

N.B.—A. and B. to be done on separate sheets and collected separately.

A. Le temps était lourd, orageux, d'une chaleur suffocante; quelques larges gouttes, les seules qui fussent tombées depuis quatre mois de cet implacable ciel de lapis-lazuli, tachetaient le sable altéré et le faisaient ressembler à une peau de panthère; cependant la pluie ne se décida pas, et la voûte céleste reprit son immuable sérénité. Le temps fut si constamment bleu pendant mon séjour en Espagne, que je retrouve sur mon carnet une note ainsi conçue: "Vu un nuage blanc," comme une chose tout à fait digne de remarque.—Nous autres hommes du Nord, dont l'horizon encombré de brouillards offre un spectacle toujours varié de formes et de couleurs, où le vent bâtit avec les nuées des montagnes, des îles, des palais qu'il ruine sans cesse pour les reconstruire ailleurs, nous ne pouvons nous faire une idée de la profonde mélancolie qu'inspire cet azur uniforme comme l'éternité et qu'on retrouve toujours suspendu au-dessus de sa tête. Dans un petit village que nous traversâmes, tout le monde était sorti sur les portes afin de jouir de la pluie, comme chez nous l'on rentre pour s'en garantir. La nuit était venue sans crépuscule, presque subitement, comme elle arrive dans les pays chauds, et nous ne devions plus être fort loin de Velez-Malaga, lieu de notre couchée.

B. C'est dans ce doux pays qu'a vécu Suétone;
Et de l'humble villa voisine de Tibur,
Parmi la vigne, il reste encore un pan de mur,
Un arceau ruiné que le pampre festonne.

C'est là qu'il se plaisait à venir, chaque automne,
Loin de Rome, aux rayons des derniers ciels d'azur,
Vendanger ses ormeaux qu'alourdit le cep mûr.
Là sa vie a coulé tranquille et monotone.

Au milieu de la paix pastorale, c'est là
 Que l'ont hanté Néron, Claude, Caligula,
 Messaline rôdant sous la stole pourprée ;
 Et que, du fer d'un style à la pointe acérée
 Egratignant la cire impitoyable, il a
 Décrit les noirs loisirs du vieillard de Caprée.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—June, 1899.

FRENCH GRAMMAR AND TRANSLATION.

A.

1. Put into fem. sing. : un vieux Turc.
 le duc traître.
 into plur. : un grand trou.
 cette femme s'est sauvée.
2. Give the French for :
 every Saturday night : 22½ : 10 francs a pound :
 98th : 1101 : Wednesday, the 4th of July :
 in the last 100 years.
3. Explain the construction of the words in *Italics* :
 (i.) Je *vous* demande pardon.
 (ii.) Il n'y a pas *de quoi*.
 (iii.) Je doute qu'il *soit* arrivé.
 (iv.) Je ne connais personne qui *soit* aussi bon que vous.
 (v.) Il *me* faut de l'argent.
 (vi.) Les pommes que j'ai *vu* manger.
4. Give 3rd pers. sing. pres. subj. and fut. indic of :
 falloir, coudre, moudre, partir.
 Past Partic. : croire fuir résoudre requérir.
 Pres. Part. : plaie valoir croître savoir.
 Preterite Ind. : battu faisant né ceint.
5. Explain with examples the uses of *quelque*, especially distinguish from *quel que*.
6. Translate into French, and state the rule for tenses after *si* :
 If I were you, I should not do that.
 If he goes, I shall go with him.
 If you should meet him, you may tell him so.
7. French for :
 a few people have come : were there several of them ? :
 amongst others : out of the window :
 in spring : as far as my house.
8. English for :
 sitôt que : je ne m'y connais pas : désormais :
 à cela près : ça y est : laissez-moi faire.

B.

Turn into French :

1. (i.) Was it you whose brother I met in Paris last week ?
- (ii.) He very much wanted to know what you meant.
- (iii.) They run faster than you would have thought.
- (iv.) They must have broken the glass ; no one else was there.
- (v.) As soon as he saw me, he burst out laughing.
- (vi.) Is there anyone who does not know about it ?
- (vii.) Do send her the letter you promised to lend her.
- (viii.) Can you tell them what has become of her ?

2. I was just thinking of starting off to lunch with you, when I began to wonder where my hat was. After looking everywhere for it, I found it at last on the sofa, where your friend Dr. S—, who is neither small nor light, as you well know, had been sitting on it for three-quarters of an hour! What was I to do? I had no hat, and it being Sunday morning all the shops, of course, were shut and no gentleman can go out in London in a deerstalker, so instead of enjoying the pleasure of your society, I spent the whole day reading in this dreary hotel. Don't you pity me ?

GERMAN TRANSLATION.

A. *Goethe in Youth.*

Der Verlust eines Freundes, wie Schriß, war für mich von der größten Bedeutung. Er hatte mich verzogen, indem er mich bildete, und seine Gegenwart war nöthig, wenn Das einigermaßen für die Societät Frucht bringen sollte, was er an mich zu wenden für gut gefunden hatte. Er wußte mich zu allerlei Artigem und Schicklichem zu bewegen, was gerade am Platz war, und meine geselligen Talente herauszusetzen. Weil ich aber in solchen Dingen keine Selbstständigkeit erworben hatte, so fiel ich gleich, da ich wieder allein war, in mein wirrighes, störrisches Wesen zurück, welches immer zunahm, je unzufriedener ich über meine Umgebung war, indem ich mir einbildete, daß sie nicht mit mir zufrieden sei. Mit der willkürlichen Paune nahm ich übel auf, was ich mir hätte zum Vortheil rechnen können, enifernte Manchen dadurch, mit dem ich bisher in leidlichem Verhältniß gestanden hatte, und mußte bei mancherlei Widerwärtigkeiten, die ich mir und Andern, es sei nun im Thun oder Unterlassen, zuviel oder Zuwenig zugezogen hatte, von Wohlwollenden die Bemerkung hören, daß es mir an Erfahrung fehle.

B. *German Student Life.*

Es war ein rühmlicher Kampf gewesen und lange haftete die Erinnerung daran. Denn er wurde für beide Genossenschaften verhängnißvoll. Der Behörde fiel eine Kunde zu und da der Zufall wollte, daß gerade aus der Residenz eine der periodischen Missionen zur Abstellung unerlaubter Verbindungen eingetroffen war mit Scharfen Bemerkungen über sehr gewährte Nachsicht, so mußte der Senat, der eine Zeit lang beide Augen

zugedrückt hatte, sich ungern entschließen, eine große Untersuchung eintreten zu lassen. Nun hatten die Thüringer am meisten mit Nachwächtern und Bedellen zu thun gehabt und wurden deshalb zum Objekt des gesellschaftlichen Hornes auserwählt. Aber auch die Vandalen gingen nicht leer aus.

C. Auf eine Tänzerin.

Wenn du den leichten Reigen fühltest,
Wenn du den Boden kaum berührtest,
Hinschwebend in der Jugend Glanz:
In jedem Aug' ist dann zu lesen,
Du seiest nicht ein irdisch Wesen,
Du seiest Äther, Seele ganz.

Mir aber grauet; wenn nach oben
Du würdest plötzlich nun enthoben,
Wie wärest, Seele, du bereit?
Wohlan! der sich auf Blumen schaukelt,
Der Schmetterling, der ewig gaukelt,
Ist Sinnbild der Unsterblichkeit.

GERMAN GRAMMAR AND COMPOSITION.

1. Write out the following, giving every adjective its proper termination:

unser (schön) Haus	meinem (alt) Vater
unsere (schön) Häuser	ein (neu) Buch
manche (bunt) Blume	feine (jünger) Brüder
mancher (bunt) Blumen	aus (denselb) Grunde
jedes (einzeln) Kind	ohne die (geringst) Not
kein (vernünftig) Mensch	mit (gleich) Vorsicht.

2. What cases do you use with the words:

würdig — lehren — ungeachtet — entgegen —
wider — zwischen — gefallen — gewiß.

3. Re-write the following English words in German order, and account for every change you make:

“Under the circumstances I would have left him in the garden alone with his dogs.”

4. Give the genitive singular and the nominative plural of:

der Feld, die Luft, der Name, der Geist,
das Weib, der Tod, das Ohr, das Band, die Bier.

5. Write down the third person singular of the Present Indicative, of the Imperfect Subjunctive, and of the Perfect Indicative of:

müssen, fallen, wissen, mögen, sterben, and bringen.

6. Give the Infinitive of:

bäute, erfor, mißverständnis, tritt, zerhieb, erwögen, leucht.

7. Give the English cognate forms of
Eiße — schlagen — grüßen — Thal — Dorf;
and give one other example of each change involved.

8. Give the Past Participle of
vorkommen, wegnehmen, bemerken, antworten, zerreißen, aufstehen,
and distinguish between the Participles
übergelassen and überlassen — umgebaut and umbaut —
durchgereift and durchreift.

9. What is the German for :
It's all one to me what becomes of him.
Taken as a whole the Germans are a stronger race than
the French.
What a wonderful day !
Don't be long !
It is most unpleasant that you should have to go now.
Your old friend's language is more difficult to understand
than yours.
Out of the frying-pan into the fire, isn't it ?

10. Translate into German :

Munich, 11th April, 1897.

My Dear Sir,

It has occurred to me that you may be interested in an event that took place yesterday in a small neighbouring town. The townspeople, who are generally not very enthusiastic about local affairs, were excited in an unusual degree by the news of the probable visit of the Emperor to Krähwinkel. Accordingly they held a meeting to discuss the most appropriate way of celebrating the honour that fell to their lot. The Mayor said that they should be mindful of the ancient traditions of their town, and that every man should exert himself to the utmost to prepare a suitable reception for His Imperial Majesty. Every house should be flagged from top to bottom, and every child should be dressed in holiday attire. Let it be their care that the Emperor, when he returned to his capital, should exclaim : " This is indeed a splendid reception, but the people of Krähwinkel did it better after all."

I feel sure that you will be amused at this instance of provincial self-importance.

With kind regards,
Yours very truly,
F. M.

WINCHESTER COLLEGE ELECTION.—5th July, 1899.

FRENCH.

[*N.B.—In assigning marks to this paper, consideration will be paid to the ages of the Candidates.*]

I. Translate into French :—

1. When you go to Paris, you will have to speak French.
2. If my friend comes while I am out, ask him to wait.
3. There are more soldiers in Russia than in France.
4. Have you brought the books I bought yesterday.

II. Write a short account *in French* of one of the following :—
Julius Cæsar, William the Conqueror, Marlborough.

III. Translate into English :—

Un des premiers exploits de ces troupes anglaises, fut de prendre Gibraltar, qui passait avec raison pour imprenable. Une longue chaîne de rochers escarpés en défendent toute approche du côté de terre ; il n'y a point de port ; une baie longue, mal sûre et orageuse y laisse les vaisseaux exposés aux tempêtes et à l'artillerie de la forteresse et du môle. Les bourgeois seuls de cette ville la défendraient contre mille vaisseaux et cent mille hommes ; mais cette force même fut la cause de la prise. Il n'y avait que cent hommes de garnison ; c'en était assez ; mais ils négligeaient un service qu'ils croyaient inutile. Le prince de Hesse avait débarqué avec dix-huit cents soldats dans l'isthme qui est au nord derrière la ville ; mais, de ce côté-là, un rocher escarpé rend la ville inattaquable. La flotte tira en vain quinze mille coups de canon. Enfin des matelots, dans une de leurs réjouissances, s'approchèrent dans des barques sous le môle, dont l'artillerie devait les foudroyer ; elle ne joua point. Ils montent sur le môle ; ils s'en rendent maîtres ; les troupes y accourent ; il fallut que cette ville imprenable se rendit (4 août 1704).

ETON COLLEGE ELECTION, 1899.—Tuesday, 4th July, 3—5 p.m.

FIRST MATHEMATICAL PAPER.

1. A man's debts amount to £8976 16s., what sum of money is required for the payment of a dividend of 12s. 9½d. ?
2. A garrison of 1000 men have sufficient food for 90 days. If 200 men be added to the garrison and the daily ration decreased by one-fourth, how long will the food last ?
3. If a metre is 39·371 inches, express a yard in metres and a mile in kilometres, each to three places of decimals.
4. Find the true discount on £4478 16s. 9d. for 4½ years at 4 per cent.

5. If the price of New South Wales 4 per cent. stock is $101\frac{1}{2}$, find the income derived from investing £66,381. What profit would be made by selling out when the price has risen to 103?

6. Divide (1) $x^4 + 4x^2 + 16$ by $x^2 - 2x + 4$.
(2) $a^3 + b^3 + 3ab - 1$ by $a + b - 1$

7. Find the factors of

- (1) $12x^2 - 7x - 110$.
(2) $(x^2 + 2x - 5)^2 - (x^2 - 2x - 3)^2$.
(3) $27x^4 + 64x$.

8. solve the equations

$$(1) \left. \begin{aligned} \frac{1-3x}{7} - \frac{3y+1}{5} &= 2 \\ y+9 &= \frac{3x-y}{11} \end{aligned} \right\}$$

$$(2) (x-a)^2(x+4a) = (x+2a)^2(x-2a).$$

9. The incomes of two men are in the ratio of 11 : 6 and their annual expenditures in the ratio of 7 : 2. Each of them saves £100, find their incomes.

10. If from the ends of the side of a triangle there be drawn two straight lines to a point within the triangle, these shall be less than the other two sides of the triangle, but shall contain a greater angle.

11. If the square described on one of the sides of a triangle be equal to the squares described on the other two sides of it, the angle contained by these two sides is a right angle.

12. The ends of a rope EDF are to be tied to two rafters AB , AC , so that its parts ED and FD (of given lengths) are perpendicular to AB and AC respectively, give a geometrical construction for finding the lengths of AE and AF .

ETON COLLEGE ELECTION, 1899.—Wednesday, July 5th,
10.30—12.30.

SECOND MATHEMATICAL PAPER.

1. Find the number of acres in a square field whose circumference is one mile and a half. Also shew that the length of its diagonal is between 53 and 54 yards more than half a mile.

2. Find the quotient when
 $(cy - bz)^2 + (az - cx)^2 + (bx - ay)^2 + (ax + by + cz)^2$
is divided by $x^2 + y^2 + z^2$.

3. Add together the fractions

$$\frac{a+b}{ab+c^2-ac-bc}, \frac{a}{ac-c^2} \text{ and } \frac{b}{bc-c^2}.$$

4. Solve the equations

- (1) $\frac{2}{x+1} = \frac{4}{x-3} - \frac{3}{4}$.
(2) $x^2 + y^2 + x + y = 32$; $xy = 12$.

5. A boy who runs to school at the rate of 10 miles an hour, is one minute late; if he had run at the rate of 12 miles an hour, he would have had half a minute to spare. How far had he to go and how much time had he to do it?

6. Solve the equation

$$x^2 - ax - 12a^2 + 5x + 22a = 6,$$

and determine the factors of

$$x^2 - xy - 12y^2 + 5x + 22y - 6.$$

7. Find the sum of 20 terms of an arithmetic series, whose 7th term is 16 and its 13th term 31.

8. If the difference of the roots of the equation

$$x^2 - 2(a+c)x + b^2 = 0$$

be equal to the difference of the roots of the equation

$$x^2 + 2(b+c)x + a^2 = 0,$$

and a be not equal to b , prove that each equation has its two roots equal to one another.

9. If a straight line be divided into any two parts, the squares on the whole line, and on one of the parts, are equal to twice the rectangle contained by the whole and that part, together with the square on the other part.

10. From a given point O external to a given circle draw a straight line OPQ to cut the circle at two points P and Q , so that OP shall be equal to PQ .

11. The opposite angles of any quadrilateral figure inscribed in a circle are together equal to two right angles.

12. If I be the centre of the circle inscribed in the triangle ABC , prove that the centres of the three circles, which circumscribe the triangles IBC , ICA and IAB , are on the circumference of the circle circumscribing the triangle ABC .

13. If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the segments of the base shall have the same ratio as the other sides of the triangle have to one another.

MARLBOROUGH COLLEGE SCHOLARSHIPS EXAMINATION.—June, 1899.

ELEMENTARY MATHEMATICS.

I. If one side of a triangle be produced the exterior angle is equal to the sum of the interior opposite angles.

ABC is an equilateral triangle: if each of its angles be trisected, show that the trisecting lines taken three and three together will form two more equilateral triangles, and find the size of each of the angles in the hexagon formed by the six lines of trisection.

II. Prove that the angles in the same segment of a circle are equal to one another.

The diagonals of a quadrilateral inscribed in a circle intersect at right angles: from the point of intersection a perpendicular is drawn on one of the sides, show that this perpendicular, if produced backwards, will bisect the opposite side.

III. On a given straight line describe a segment of a circle containing an angle equal to a given angle.

If the straight line be 2 inches in length, and the given angle 150° , what is the length of the radius of the circle?

IV. Express $\frac{2}{7} + \frac{3}{11} - \frac{5}{13} + \frac{4}{17} - \frac{2}{19}$ as a decimal.

V. Find the prime factors of 13464, 40560 and 631584, and write down (in factors) their L.C.M.

VI. A man sells a watch at $2\frac{1}{2}$ per cent. below cost price; had he received 6s. more than he did he would have made a profit of 5 per cent. What did the watch cost?

VII. A cubic centimetre of gold weighs 18.5 grams, and a c.c. of silver 10.5 grams. An alloy of silver and gold is made and 14 c.c. of it is found to weigh 219 grams. How much of this was gold, and how much silver?

VIII. A rectangular field of 5 acres is twice as long as it is wide. How long would it take to walk round it at the rate of $3\frac{1}{4}$ miles an hour?

IX. What is the remainder when $a^5 - 20b^5$ is divided by $a - 2b$?

X. Reduce to lowest terms

$$\frac{9a^2 + 6ab - 3ac - 15a}{9a^2 - 4b^2 - c^2 - 30a + 4bc + 25}.$$

XI. The sum of two numbers multiplied by their product is equal to the sum of the cubes of the numbers. Prove that the numbers must be equal.

XII. Simplify.

$$\left\{ 1 + \frac{\frac{3}{x} - 1}{x - 5 + \frac{6}{x}} \right\} \left\{ \frac{1 - \frac{1}{x^2}}{1 - \frac{2}{x} - \frac{3}{x^2}} + 1 \right\}.$$

XIII. Prove that, if α, β be the roots of the quadratic $ax^2 + bx + c = 0$,

then

$$\alpha + \beta = -\frac{b}{a} \quad \alpha\beta = \frac{c}{a}.$$

Given that one root of

$$3701x^2 - 8258x + 3071 = 0$$

is $2\frac{3}{17}$, find the other.

MARLBOROUGH COLLEGE JUNIOR MATHEMATICAL AND JUNIOR
MODERN SCHOOL SCHOLARSHIPS.—June, 1899.

ELEMENTARY TRIGONOMETRY AND PROBLEMS. •

- I. Prove that circumferences of circles vary as their radii.
 II. Express the external angle of a regular polygon of n sides in degrees, grades, and radians.

III. If $\tan A + \sec A = a$, find $\sin A$.

IV. If $A + B + C = 180^\circ$
 prove $\tan A + \tan B + \tan C = \tan A \tan B \tan C$.

V. Prove

$$\frac{\sin A + \sin 5A + \sin 9A}{\cos A + \cos 5A + \cos 9A} = \frac{\sin 5A}{\cos 5A}.$$

VI. Prove $\tan(-A) = -\tan A$.

Find the value of $\tan(-225)$.

VII. A person stands on the bank of a river and observes that a tower on the opposite bank subtends an angle of 60° . He retires 20 yards, and then finds that the tower subtends half the former angle. Find the height of the tower and the breadth of the river.

VIII. Find all the angles between 0° and 360° which satisfy the following equations:

$$(1) \sin \theta = 1 - \cos 2\theta.$$

$$(2) \tan \theta + \cot \theta = 2.$$

IX. Find, without division, the remainder when

$$x^5 - 33x^3 - 32 \text{ is divided by } x - 2.$$

X. For what value of x is

$$x^4 + 6x^3 + 17x^2 + 6x + 12$$

a perfect square.

XI. Prove that the straight line which joins the middle parts of the non-parallel sides of a trapezium is equal to half the sum of the parallel sides.

XII. Define the projection of a line.

If the two ends of a parallelogram are projected on to any line, prove that the projections are equal.

MARLBOROUGH COLLEGE JUNIOR SCHOLARSHIPS.—June, 1899.

HIGHER EUCLID AND ALGEBRA.

I. Draw a circle to touch two given straight lines and have its centre on a third.

How many solutions are there ?

II. About a given circle describe a parallelogram having one of its angles equal to a given angle.

III. Inscribe in a circle a regular quindecagon.

Show how to draw a triangle having its angles in the ratios 3 : 5 : 7.

IV. A quadrilateral $ABCD$ has the sides AB and CD parallel and AB is three times as long as CD . The diagonals AC , BD intersect at O . Show that CO is a quarter of CA .

V. Two triangles have an angle of the one equal to an angle of the other, and the sides about those angles proportionals. Prove the triangles similar.

VI. AB is a tangent to a circle and ACD is a line cutting the circle at C and D . Prove that AC is to AD in the duplicate ratio of AC to AB .

VII. Solve:—

$$\begin{aligned} (1) \quad & \left. \begin{aligned} x^2 + xy + x &= 18 \\ y^2 + xy + y &= 12 \end{aligned} \right\} \\ (2) \quad & \left. \begin{aligned} a^2x^2 + b^2y^2 &= a^4 + b^4 \\ ax + by &= a^2 + b^2 \end{aligned} \right\} \end{aligned}$$

VIII. Simplify :

$$\begin{aligned} (1) \quad & \left(\frac{25}{128} \right)^{-\frac{1}{3}} \times 10^{\frac{1}{3}} \\ (2) \quad & \frac{1}{\sqrt{16-6\sqrt{7}}} + \frac{1}{\sqrt{16+3\sqrt{28}}} \end{aligned}$$

IX. If $a : b :: c : d$ show that $ab + cd$ is a mean proportional between $a^2 + c^2$ and $b^2 + d^2$.

X. Sum the series :

$$\begin{aligned} (1) \quad & -9, -7, -5 \dots \text{to 25 terms.} \\ (2) \quad & 12, -18, 27 \dots \text{to 6 terms.} \end{aligned}$$

XI. If a, b, c are in G.P., then will $a + b, 2b, b + c$ be in H.P.

XII. Show that the number of permutations of n things taken altogether, of which p are alike and the rest unlike, is

$$\frac{n!}{p!}$$

How many words can be made by using any or all of the letters of the word "Arabians," it being stipulated that the three "a's" occur in every word ?

MARLBOROUGH COLLEGE—FOR SENIOR MATHEMATICAL, AUTHORS',
AND SENIOR MODERN SCHOOL SCHOLARSHIPS.—June, 1899.

GEOMETRY.

I. A circle passes through the angle A of an equilateral triangle ABC , and cuts AB , AC produced in D , E respectively, and BC produced both ways in F , G : show that the difference between AD and AE is equal to the difference between BF and CG .

II. If any angle of a triangle is bisected by a straight line which cuts the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the segments of the base together with the square on the line which bisects the angle.

Whence Prove

III. The bisector AD of the angle BAC of a triangle cuts the base BC in D . Perpendiculars on AD from B and C meet it in E and F . Prove that the square on the straight line made up of BA and AC together is equal to the square on BC together with four times the rectangle contained by AD , AG ; where G is the middle point of EF .

IV. $OKBM$ and $OLDN$ are parallelograms about the diagonal BD of a parallelogram $ABCD$. In MN , which is parallel to BA , take any point P , and prove that if PC , produced if necessary, meet KL in Q , BP will be parallel to DQ .

V. Find the locus of a point such that the ratio of its distances from two fixed points is constant.

VI. $ABCD$ is a face of a cube; AE a diagonal of the cube; and AF an edge parallel to CE . Show that AE is perpendicular to the plane BDF .

MECHANICS.

VII. The sides AB , BC , CA of an equilateral triangle represent in direction and sense three forces $1 : 2 : 3$ acting at a point, and AB represents the force 1 in magnitude; show that their resultant is represented by BD drawn at right angles to meet CA in D .

VIII. Prove that the resultant of forces represented completely by $\lambda \cdot OA$ and $\mu \cdot OB$ is completely represented by $(\lambda + \mu) OG$, where G is such a point on the line AB that $\lambda \cdot AG = \mu \cdot GB$.

IX. ABC is a triangle. G is its centre of gravity. Find the centre of gravity of the figure $ABGC$ formed by removing the triangle BGC .

X. The unit of density being 9 pounds per cubic foot, the unit of force the weight of 4 ounces, and the unit of energy the kinetic energy of a mass of 2 pounds moving with a velocity of 4 feet per second, find the units of length, time, and mass.

XI. A uniform rod of length $6a$ makes an angle of 45° with the horizon, being supported by passing below one and above the other of two equally rough parallel horizontal pegs, whose distance apart is $2a$ and to which it is at right angles. If the lower peg is at the lower end of the rod, and slipping is on the point of taking place, determine the coefficient of friction.

Show that if a weight is suspended from the upper end of the rod, the value of the coefficient of friction necessary to prevent slipping will be diminished.

XII. A man rows with velocity u across a stream, keeping the nose of the boat pointed straight across. The stream flows with velocity v . The wind blows in a direction making an angle θ with the downward course of the stream and drives him back with velocity w . If he drifts x yards downwards during the crossing, find the breadth of the stream, the velocity being given in feet per second.

XIII. An ironclad weighs 10,600 tons and carries guns which throw a shell weighing 2,000 lbs. with a velocity of 2,300 feet per second. If the energy of one shell as it leaves the muzzle of the gun were expended in raising the ship bodily, how high would it raise it?

XIV. The driver of an express travelling at velocity u , sees ahead of him a train at rest. He immediately applies the brake, thus communicating a retardation of a_1 . At the same instant the other train starts with acceleration a^2 .

What distance must originally separate the trains, if they are just to escape collision?

MARLBOROUGH COLLEGE SCHOLARSHIPS EXAMINATION.—

June 1899.

CONIC SECTIONS AND TRIGONOMETRY.

I. In the parabola, if the ordinate and normal meet the axis in N and G , prove that $SP : AN$ is the duplicate ratio of $PG : PN$.

II. If QV is an ordinate to the diameter PV , then

$$QV^2 = 4SP \cdot PV.$$

III. In the ellipse, $SG = c \cdot SP$.

If the tangent at P meets the directrix in Z , the triangles SZX and PSN are similar.

IV. Tangents OQ, OQ' are inclined at equal angles to OS, OS'
 If $SQ, S'Q'$ meet in W , OW bisects the angle QWQ' .

V. Show how to write down the equation of the line drawn through the intersection of $3x + 5y + 7 = 0$ and $x - 9y = 11$, which is also perpendicular to the axis of y .

VI. Prove analytically that the two straight lines joining the origin to the points of intersection of

$$x^2 + y^2 = ax + by \quad \text{and} \quad 2y + ma = b + 2mx,$$

are at right angles.

VII. Find the equation of the circle of which the line joining the focus of a parabola to a point on the curve is a diameter, and show that it touches the tangent at the vertex.

VIII. Find the equation of a tangent to $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ which is parallel to $y = mx$.

Show that two tangents to $3x^2 + 4y^2 = 24$ which are at right angles will intersect upon the circle $x^2 + y^2 = 14$.

IX. Prove the following:—

$$(1) \tan 70^\circ = \tan 20^\circ + 2 \tan 40^\circ + 4 \tan 10^\circ.$$

$$(2) \frac{1}{1 + 2 \cos\left(\frac{\pi}{3} + \theta\right)} + \frac{1}{1 + 2 \cos\left(\frac{\pi}{3} - \theta\right)} = \frac{1}{2 \cos \theta - 1}.$$

$$(3) \cos \frac{2\pi}{7} + \cos \frac{4\pi}{7} + \cos \frac{8\pi}{7} = -\frac{1}{2}.$$

X. Find the area of a circle traced by a pair of compasses, when the legs are 6 inches long, and the angle between them is 45° .

XI. Find the value of $\sin 18^\circ$.

The alternate angles of a regular pentagon are all joined: find the ratio of the side of the interior pentagon thus formed to the side of the original figure.

MARLBOROUGH COLLEGE.—June, 1899.

SENIOR MATHEMATICAL, AUTHORS' AND MODERN SCHOOL SENIOR SCHOLARSHIPS.

ALGEBRA AND HIGHER TRIGONOMETRY.

I. Define the terms "Homogeneous" and "Symmetrical" as applied to algebraic expressions.

If $x^2 - 2xy + 3y^2$ is a factor of

$$3x^4 + ax^3y + bx^2y^2 + axy^3 + 3y^4$$

find the values of a and b .

$$\text{II. If } \frac{y+z+3x}{a} = \frac{z+x+3y}{b} = \frac{x+y+3z}{c}$$

$$\text{then will } \frac{4a-b-c}{x} = \frac{4b-c-a}{y} = \frac{4c-a-b}{z}.$$

III. If $ax^2 + bx + c = 0$ has imaginary roots prove that the expression $ax + bx + c$ has the same sign as " a " for all real values of x .

IV. Sum to n terms the series
 $1^2 + 2^2 + 3^2 + \dots$

Also show that

$$1^2 + (1^2 + 2^2) + (1^2 + 2^2 + 3^2) + \dots \text{ to } n \text{ terms is equal to } \frac{n(n+1)^2(n+2)}{12}.$$

V. Prove that

$${}^nP_r = n(n-1)(n-2) \dots (n-r+1).$$

VI. Prove that the coefficient of x^n in the expansion powers of x of $\frac{1+3x}{(1+x)^2}$ is $(-1)^{n+1}(2n-1)$.

VII. Show that

$$x^2 + \frac{1}{x^2} - \frac{1}{2} \left(x^4 + \frac{1}{x^4} \right) + \frac{1}{3} \left(x^6 + \frac{1}{x^6} \right) \dots = \log \left(2 + x^2 + \frac{1}{x^2} \right).$$

VIII. Prove that $n! > 1 \cdot 3 \cdot 5 \cdot 7 \dots (2n-1)$.

IX. In three throws with a single die find the chance of throwing 6 at least once.

X. Obtain formulae for solving a triangle, having given $C, c, a + b$.

Solve the triangle in which $C = 60^\circ, c = 5, a + b = 5\sqrt{2}$.

XI. With the usual notation prove that

$$\cos A = \frac{2R + r - r_1}{2R}.$$

XII. Prove that the sides of the pedal triangle are $R \sin 2A, R \sin 2B, R \sin 2C$.

XIII. Prove De Moivre's Theorem for a positive fraction, assuming it true for a positive integer.

Solve the equation.

$$x^6 + x^5 + x^4 + x^3 + x^2 + x + 1 = 0.$$

XIV. Express $\log(x + iy)$ in the form $A + Bi$.

XV. Sum the series :

(1) $\sin^2 a + \sin^2 3a + \sin^2 5a + \dots$ to n terms.

(2) $\operatorname{cosec} a \operatorname{cosec} 3a + \operatorname{cosec} 3a \operatorname{cosec} 5a$
 $+ \operatorname{cosec} 5a \operatorname{cosec} 7a + \dots$ to n terms.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

1. A number is divided successively by 9, 8, 7 and the remainders are 6, 5, 4; find the total remainder after dividing by 504.

2. Simplify $\cdot 013656$ of £2 6s. 8d. + $3\cdot 074$ of £1 12s. $0\frac{1}{4}$ d.

3. A path 2 yds. wide is made round (inside) a 10 acre field. Find the cost of gravelling at $1\frac{1}{2}$ d. a sq. ft.

4. A shopman buys an article for 10d. and retails it for 1s. Allowing 12 per cent. on cost price for the working expenses of the shop and a discount of 5 per cent. for ready money, find the percentage actually cleared by him on this article. How many articles will he have to sell to realise a total profit of £200?

5. If $x = \frac{a-b}{a+b}$, find the value of
 $(a^2 + 3ab + 2b^2)x^2 - 2abx - a^2 + 3ab - 2b^2$.

6. Find the G.C.M. of

$$6x^2 + 7x + 2, 4x^2 - 8x - 5, 2x^3 + 11x^2 + 11x + 3.$$

7. Solve the equations:—

$$\left. \begin{array}{l} (1) \ 2x^2 + 5xy + 2y^2 = 56 \\ \quad \quad 2x + y = 8 \end{array} \right\}$$

$$(2) \ a^2x^2 - 2a^2x + a^2 - 1 = 0.$$

8. In a journey of 48 miles if a man go 2 miles an hour faster he will complete it in 4 hours less; find his rate of going.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION, 1899.

EUCLID.

I. Define a plane angle, a rhombus, and similar segments of circles.

2. If two triangles have two angles of the one equal to two angles of the other each to each, and the sides opposite to one of the equal angles in each equal, then the triangles are equal in all respects.

Through a given point draw a straight line such that the perpendiculars on it from two given points may be equal to one another.

3. On a given line describe a parallelogram equal to a given triangle and having an angle equal to a given rectilineal angle.

On a given straight line describe a triangle equal to a given parallelogram and having one of its angles half a given angle.

4. In every triangle, the square on the side subtending an acute angle, is less than the squares on the sides containing that angle, by twice the rectangle contained by either of these sides, and the straight line intercepted between the perpendicular let fall on it from the opposite angle, and the acute angle.

If ABC is an isosceles triangle, and D a point in the base BC produced; show that the difference of the squares on AD and AC is equal to the rectangle contained by BD and CD .

5. The opposite angles of any quadrilateral figure inscribed in a circle are together equal to two right angles.

Two circles intersect in points P and Q . A straight line MPN is drawn terminated by the circles at M and N . Through M and N tangents are drawn to the two circles intersecting at T . Prove that $M N Q T$ all lie on the circumference of a circle.

6. On a given straight line to describe the segment of a circle, containing an angle equal to a given rectilineal angle.

7. To describe an isosceles triangle, having each of the angles at the base double of the third angle.

Hence show how to describe a triangle such that one of its angles may be half and treble the other angles of the triangles respectively.

8. If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the segments of the base shall have the same ratio which the other sides of the triangle have to one another; and if the segments of the base have the same ratio which the other sides of the triangle have to one another, the straight line drawn from the vertex to the point of section shall bisect the vertical angle.

If the points are given where the internal and external bisectors of the vertical angle meet the base, find the locus of the vertex of the triangle.

9. If I, O be the centres of the inscribed and circumscribed circles of a triangle ABC , and if AI be produced to meet the circumscribed circle in F , then OF bisects BC .

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION, 1899.

TRIGONOMETRY AND PROBLEMS.

1. Define circular measure.

Find the length of that part of a circular railway curve which subtends an angle of $24^\circ 15'$ to a radius of a mile.

2. Find all the values of θ less than 360° which satisfy the equation $\cos^3 \theta + \sin^2 \theta - 1 = 0$.

3. A measured line of length l is drawn from a point in a horizontal plane at right angles to the line joining that point to the foot of a tower. The angles of elevation of the top of the tower from the two ends of the line are 30° and 15° ; find the height of the tower.

4. Prove.

$$(1) \cos A - \cos B = \cos A \cos B + \sin A \sin B.$$

$$(2) 2 \operatorname{cosec} 4A + 2 \cot 4A = \cot A - \tan A.$$

$$(3) \cot^2 \left(45^\circ + \frac{A}{2} \right) = \frac{2 \operatorname{cosec} 2A - \sec A}{2 \operatorname{cosec} 2A + \sec A}.$$

5. In any triangle prove that

$$(1) \tan \frac{B-C}{2} = \frac{b-c}{b+c} \cot \frac{A}{2}.$$

$$(2) \frac{a^2 + b^2 - ab \cos C}{a \sin A + b \sin B + c \sin C} = \frac{a}{2 \sin A}.$$

$$(3) \sin^2 \frac{A}{2} + \sin^2 \frac{B}{2} + \sin^2 \frac{C}{2} + 2 \sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2} = 1.$$

6. Define a logarithm. If a, b, c are in Geometrical Progression, prove that $\log ax, \log bx, \log cx$ are in Harmonical Progression.

Given $\log \frac{1}{2} = 1.6989700$ and $\log \frac{1}{3} = 1.5228787$. Find the logarithms of $\frac{2}{3}\sqrt[3]{14.4}$ and $\sqrt[5]{(.0005)^3}$.

7. In a triangle given

$$a = 2b, C = 120^\circ, \log B = .4771213.$$

$$L \tan 10^\circ.53' = 9.2839070 \text{ diff. fm. } 1^\circ = 6808.$$

Find A and B .

PROBLEMS

1. In the Oxford and Cambridge boat race, the number of minutes occupied in the race was half the average number of strokes per minute, and five times the number of miles rowed. The total number of strokes was 968. Find the length of the course and the time.

2. The number of degrees in the angle of one regular polygon exceeds the number of degrees in the angle of another, of which the number of sides is one less, by 4. Find the number of sides of each.

3. A railway train after travelling 1 hour meets with an accident which delays it an hour, after which it proceeds at $\frac{3}{4}$ of its former rate and arrives 5 hours late. Had the accident occurred 50 miles farther on, the train would have been 3 hrs. 20 min. late. Find the whole distance and the rate of the train.

4. One root of the equation $3x^3 + px - 14739 = 0$ is the square of the other. Find the roots and the value of p .

5. The weight of a hollow metal sphere 10 inches in diameter and one inch thick, when filled with water is $\frac{9}{10}$ of the weight of a solid sphere of the same metal. If the volume of a sphere vary as the cube of the radius, find the ratio of the weights of equal volumes of the metal and water.

9. If one side of a triangle be produced show that the exterior angle thus formed is greater than either of the two interior opposite angles.

ABC is a triangle having angle ABC greater than angle ACB ; AD is drawn bisecting angle BAC and meeting BC at D . Prove that CD is greater than BD .

10. If a straight line be divided equally and unequally, show that the rectangle contained by the unequal parts together with the square on the line between the points of section is equal to the square on half the line.

11. If from a point on the circumference of a circle a tangent and a chord be drawn; show that the angles between the tangent and the chord are equal to the angles in the alternate segments of the circle.

ABC is a triangle and ADE is drawn bisecting angle BAC meeting BC at D and the circle described about triangle ABC at E . Show that the rectangle ED, EA = square on EB .

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

ARITHMETIC.

1. Two heaps of the same kind of shot weigh 180 tons, 4 cwts. 2 qrs., and 124 tons, 8 cwts. 2 qrs. respectively. What is the greatest possible weight of each shot?

2. Simplify

$$\frac{5\frac{3}{4} - \frac{3}{7} \text{ of } 15\frac{3}{4} + 2\frac{2}{3} \div 1\frac{1}{2}}{\frac{3}{4} \text{ of } 7\frac{3}{4} - 5\frac{3}{8} \div 3\frac{4}{5}}$$

3. Make out an account for the following goods:—

12 books at 2s. 6d. each; 3 packets of notepaper at 1s. 1½d. per packet; 2 gross of pencils at 8½d. per doz.; 20 books at 9d.; 500 envelopes at 1d. per packet of 25; 3 gross penholders at 2s. 10d. per gross; 3 reams of foolscap paper at 4s. 3d. per ream; allowing a discount of 3d. in the shilling on books only.

4. A can do ⅓ of a piece of work in ⅓ of a day, and B can do ⅓ of it in ⅓ of an hour. In what time could they do it working together?

5. A bankrupt's liabilities are £2,672 17s. 6d.; his assets £1,640. Debts amounting to £325 12s. 6d. are fully secured, and the legal expenses of the bankruptcy amount to £140 15s. What sum will a creditor receive whose claim is £47 13s. 4d.?

6. A rectangular tank measuring 3 ft. by 6 ft. receives the rain from a roof whose area is 7,200 square feet. It is estimated that in one day a pint of water fell on each square foot of roof. Starting with the tank empty, what is the depth of water in it at the end of the day, supposing 12 cubic inches to the pint?

7. A manufacturer formerly sold an article at 11s., gaining thereby 10 per cent. The cost of production having lately advanced 25 per cent., how much must he raise the price so as to clear the old profit?

8. If the difference between the "true" and the "banker's" discount on a certain bill due in three months is 3s. 4½d., what is the amount of the bill, reckoning interest at 4 per cent.?

9. A man calls in a sum of £10,000 lent on mortgage at 4 per cent., and invests the money in £3,000 L. and N.W. Ry 4 p. c. deb. stock at 133, and £3,000 G. W. Ry. 5 p. c. stock at 167. The balance he places on deposit at $2\frac{1}{2}$ per cent. What change is made in his income?

10. A man travels three miles in 17 minutes, walking, running, and cycling equal distances. He runs twice as fast as he walks, and cycles twice as fast as he runs, and loses five seconds in mounting. Find the time occupied in each mile.

ROSSALL SCHOOL SCHOLARSHIP EXAMINATION.—March, 1899.

ALGEBRA.

*Junior Candidates are not expected to attempt Questions marked **

1. Prove $(b+c)a=ba+ca$
 $x^m \times x^n = x^{m+n}.$

What meaning would you assign to x^m when m is (i) fractional, (ii) negative?

2. Factorize

(i) $x^2 + 55x - 726.$

(ii) $a(x^2 - 1) + x^2(bx - c) + x(cx^3 - b).$

What is the condition that $x^2 + 1$ may be a factor of $x^4 + x^3 + ax^2 + x + 1$?

3. Find the G.C.M. of

$$x^5 + 11x^3 - 54 \text{ and } x^5 + 11x + 12$$

and the L.C.M. of

$$a^3 - b^3, (a^2 - ab)^2, b(b^2 + ab)^3, a^4 - b^4.$$

4. Simplify

$$\left\{ \frac{b^3}{c^3} + \frac{c^3}{a^3} + \frac{a^3}{b^3} - 3 \right\} \div \left\{ \frac{b}{c} + \frac{c}{a} + \frac{a}{b} \right\}$$

and evaluate

$$\frac{(x-a)^3}{(x-b)^3} - \frac{x-2a+b}{x+a-2b} \text{ when } x = \frac{1}{2}(a+b).$$

5. Solve the equations:—

(i) $\frac{x+9}{x+8} + \frac{x-2}{3-x} + \frac{x}{1-x} - \frac{11-x}{x-12} = 0.$

(ii) $\left. \begin{aligned} x^2 + y^2 &= 13 \\ 2x - xy + 2y &= 4 \end{aligned} \right\}$

and * eliminate x, y, z from the equations

$$\begin{aligned}x + y + z &= a, \\xy + yz + zx &= 0, \\xyz &= b, \\(x + y)(y + z)(z + x) &= c.\end{aligned}$$

6. A and B run a race, the latter having $2\frac{1}{2}$ minutes start. A gains at the rate of 1 mile in 5 hours and overtakes B in 5 miles. Find their respective rates.

7. Evaluate

$$\left\{ (2x)^{\frac{1}{2}} \div \sqrt[3]{\frac{1}{3x}} \times \sqrt{3x} \div \left(\frac{1}{2x} \right)^{\frac{1}{4}} \right\}^6,$$

and, to two decimal places,

$$\frac{\sqrt{20} - \sqrt{8}}{\sqrt{5} + \sqrt{2}}.$$

*8. If α, β are the roots of the equation

$$\frac{x+4}{x-4} + \frac{x-4}{x+4} = \frac{10}{3},$$

find the value of

$$\frac{\alpha^2}{\beta+1} - \frac{\beta^2}{\alpha+1};$$

and if A, G are the Arithmetic and Geometric means of the roots of $px^2 + qx + r = 0$, form the equation whose roots are A and $\frac{G^2}{A}$.

*9. If $b + c + d : c + d + a = d + a + b : a + b + c$, prove that

$$a^3 - d^3 : a - d = b^3 - c^3 : b - c.$$

Assuming that the area of a circle varies as the square of its radius, find what fraction of the radius of a grindstone must be ground away so that only half the grindstone is left.

10. A carrier charges 6d. each for all parcels not over a certain weight, and makes an additional charge for every pound above that weight. For 1s. 5d. he carries 54 pounds. If he doubled the minimum weight, and doubled also his charge for over-weight, the charge for 54 pounds would be 1s. 11d. Find his complete scale of charges.

11. If $pn + qn^2$ be the sum of n terms of an $A.P.$, find the common difference and the r^{th} term of the series.

If a, b, c are in $G.P.$, and x, y the arithmetic means between a, b and b, c respectively, prove that $\frac{a}{x} + \frac{c}{y} = 2$.

*12. In how many ways may 16 persons seat themselves at two round tables, 8 at each?

Find the coefficient of x^6 in the expansion of

$$(1-x)^3 (1+x)^{10}.$$

Shew that

$${}^nC_1 + 2{}^nC_2 + 3{}^nC_3 + \dots + n{}^nC_n = n \cdot 2^{n-1}.$$

RUGBY SCHOOL SCHOLARSHIP EXAMINATION—June, 1899.

ELEMENTARY MATHEMATICS.

- Find the value of
£634375 + ·025 of 25s. + ·316 of 30s.
- Cost, by Practice, of three thousand four hundred and five articles at £3 11s. 9½d. each.
- A floor is 27 feet long and 19 feet broad; how many square yards does it contain? What would be the cost of carpeting it with Brussels carpet 2 feet 3 inches wide at 5s. 3d. the yard?
- If 19 pence placed end to end measure 16 inches, how many pence placed end to end will measure a mile?
- Divide $(a + b)^2 - x(a + b) - 6x^2$ by $a + b - 3x$ and test your result by putting $a = -\frac{b}{2} = -x = 1$.
- Solve the equations
 - $\frac{\frac{1}{2}-x}{2} + \frac{1-\frac{x}{2}}{\frac{3}{2}} = \frac{x}{4} + \frac{x-1}{3}$
 - $\left. \begin{array}{l} 2x = 3y \\ x + y = a \end{array} \right\}$.
- Simplify
 $\frac{(2x^3 + 4x^2y)^3}{8x^5(x^2 - 4y^2)} - \frac{x}{2y - x}$.
- A resolution was carried by a majority of 9; but if one-sixth of those who voted for it had voted against it, it would have been lost by 3: how many voted?
- If two angles of a triangle are equal, to one another, then the sides also which subtend or are opposite to the equal angles shall be equal to one another.
- Define parallel straight lines and prove that parallelograms on the same base and between the same parallels are equal in area.
- A square field contains 15 ac. 2 ro. 20 per.; find the length of a path crossing it diagonally.

12. Determine the price of 3 per cent. Consols when £5,230 stock can be bought for £4,975 0s. 9d.: find also the income obtained.

13. In a certain examination every candidate took either Latin or Mathematics, also 79.4 per cent. of the candidates took Latin and 89.6 per cent. took Mathematics. If there were 1,500 candidates altogether, how many took both Latin and Mathematics?

14. A cask contains 3 parts ale and 1 part porter; how much of the mixture must be drawn off and porter substituted in order that the resulting mixture may be half-and-half?

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—May, 1899.

EUCLID.

1. Prove that two sides of a triangle are together greater than twice the straight line drawn from the vertex to the middle point of the base.

2. $ABCD$ is a parallelogram and O is the middle point of AB . Prove that the point of intersection of AC , DO will be a point of trisection of AC .

3. If a straight line is divided equally and also unequally, the rectangle contained by the unequal parts, and the square on the line between the points of section, are together equal to the square on half the line.

ABC is an equilateral triangle and O any point in the side BC . Prove that the square on BC is equal to the rectangle BO , OC together with the square on AO .

4. Draw a common tangent to two circles.

5. If from any point without a circle a tangent and a secant be drawn, then the rectangle contained by the whole secant and the part of it without the circle shall be equal to the square on the tangent.

Two circles intersect in A and B . AC , a chord of one of them, cuts the interior arc of the other in D . BE bisects CD in E , and is produced to meet the circles in F and G .

Prove that FG is bisected at E , and that if the circles are equal $CFDG$ is a rhombus.

6. Construct an isosceles triangle having each of the base angles double of the third angle.

In the figure of this proposition prove that the chord joining the points of intersection of the two circles is a side of a regular pentagon inscribed in the smaller circle.

7. Define the terms submultiple, ratio, homologous, duplicate ratio.

8. If two triangles have one angle of the one equal to one angle of the other, and the sides about the equal angles proportionals, the triangles shall be similar.

In a given straight line PQ a point M is taken and PQ is produced to O so that MO is a mean proportional between PO and QO . If A be any point on a circle described with O as centre and OM as radius, then AM will bisect the angle PAQ .

9. Similar triangles are to one another in the duplicate ratio of their homologous sides.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—June, 1899.

ALGEBRA.

1. Find the square root of the expression

$$(4x^2 + 8xy - 21y^2)(2x^2 + 3xy - 14y^2)(2x^2 - 7xy + 6y^2)$$

and simplify

$$\frac{(ac + bd)^3 - (ad + bc)^3}{(a - b)(c - d)} - \frac{(ac + bd)^3 + (ad + bc)^3}{(a + b)(c + d)}$$

2. Find the condition that $x^3 + ax^2 + bx + c$ should be divisible by $x^2 + mx + n$ for all values of x , and without actual division prove that $x^5 + 3x^4 + x^3 + x - 6$ is divisible by $x^2 + x - 2$.

3. Two trains start at the same time from two towns, and each proceeds at a uniform rate towards the other town. When they meet it is found that one train has run 108 miles more than the other and that if they continue to run at the same rates, they will finish the journey in 9 and 16 hours respectively. Find the distance between the towns and the rates of the trains.

4. Solve the equations

$$\alpha. \frac{4x - 17}{x - 4} + \frac{10x - 13}{2x - 3} = \frac{8x - 30}{2x - 7} + \frac{5x - 4}{x - 1}$$

$$\beta. \sqrt{x + 1} - \sqrt{x + 2} - \sqrt{x + 3} + \sqrt{x + 5} = 0.$$

$$\gamma. \begin{cases} x^2 + 3xy = 40 \\ 4y^2 + xy = 9. \end{cases}$$

5. Show that

$$\frac{x}{x^3 - 1} - \frac{x^3}{x^3 + 1} - \frac{1}{x^3 - 1} + \frac{1}{x^3 + 1} = 2 + x^3.$$

and rationalise
$$\frac{1}{\sqrt{10} + \sqrt{14} + \sqrt{15} + \sqrt{21}}.$$

$$6. \text{ Given } \frac{x}{b + c - a} = \frac{y}{c + a - b} = \frac{z}{a + b - c}$$

prove that

$$(a + b + c)(yz + zx + xy) = (x + y + z)(ax + by + cz).$$

7. Find the sum of the numbers between 100 and 200 which are divisible by 3.

Also given that a_1, a_2, a_3 are in AP ; a_2, a_3, a_4 are in GP ; a_3, a_4, a_5 are in HP . Prove that a_1, a_3, a_5 are in $G.P.$

8. In the equation $\frac{p}{x-a} + \frac{q}{x-b} + \frac{r}{x-c} = 0$.

find expressions for the sum and product of the roots.

9. Prove that for real values of x , $\frac{x^2 - x + 1}{x^2 + x + 1}$ must lie between 3 and $\frac{1}{3}$.

10. Shew how to find the number of permutations of n things, taken all together, where p , are of one kind, q of another, and the rest all different.

Six papers are to be set in an examination, two of them in Mathematics; in how many different orders can the papers be given, provided only the two Mathematical papers are not successive?

11. Find the greatest coefficient in the expansion of

$$\left(1 + \frac{5x}{6}\right)^{\frac{3}{2}}$$

and prove that

$$\left(\frac{1+2x}{1+x}\right)^n = 1 + n \cdot \frac{x}{1+2x} + \frac{n(n+1)}{1 \cdot 2} \left(\frac{x}{1+2x}\right)^2 + \dots$$

Write down also the first 4 and the n^{th} terms.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—May, 1889.

ELEMENTARY PHYSICS.

1. Forces 2, 3, and 4 lbs. keep a point in equilibrium. Show how to find the angles between their respective lines of action.

2. What is the Principle of Work in Machines? Apply it to find the mechanical advantage in the system of three moveable pulleys in which one string goes round each pulley and is fastened to the beam. Apply it also to find the power required to support 112 lbs. on the system, supposing each pulley to weigh 2 lbs.

3. Explain the advantages of supporting each of the moving parts of a balance on a knife edge. What are meant by sensibility and stability? What adjustments are made to secure equal sensibility for all loads?

4. It is often said that the Earth's gravity is measured by 32. What does this mean? Indicate any method by which the statement can be proved? It is equally true for heavy and light bodies?

5. State the second law of motion. Why is the poundal used for unit of force rather than the pound weight? What is the unit of force in the metrical system? A body moving in a

straight line increases its momentum by 500 units in 20 sec. Find the force acting upon it.

6. If a stone be tied to a string and then swung round, there is a tension set up in the string. Explain this tension, and find its amount under given conditions. If the string be fixed at one end, and the stone dropped when the string is horizontal, show that the tension, when the stone is at the lowest point, is three times the weight of the stone.

7. Define the density and the specific gravity of a body. Explain fully a method of comparing the specific gravity of two liquids, without the use of the balance.

8. Describe the Barometer, and prove that it gives a measure of the pressure of the air. Given that the weight of water is 1,000 ozs. Av. per cu. ft., the specific gravity of Mercury is 13.6, and the height of the Barometer 29.6 in. Find the pressure of the atmosphere in lbs. per sq. in.

RUGBY SCHOOL SCHOLARSHIP EXAMINATION.—June, 1899.

1. Express in grades, and in circular measure, $5^{\circ} 21' 32''$.

Find the angle the number of grades in which is 4 more than two-fifths of the number of degrees.

2. Show that the sines of 30° , 45° , 60° , 90° are proportional to $\sqrt{1}$, $\sqrt{2}$, $\sqrt{3}$, $\sqrt{4}$: and find the cosine and tangent of 960° .

Obtain the expression for the general value of all angles whose sine = $\frac{1}{2}$.

3. Obtain $\cos(A - B)$ in terms of sines and cosines of A and B ; and $\cos A - \cos B$ as a product of sines or cosines.

4. Prove that $\sin \frac{A}{2} = \pm \sqrt{1 + \sin A} + \sqrt{1 - \sin A}$, and determine which signs are to be used when A is between 270° and 360° .

5. Prove (i) $\tan \frac{A}{2} = \frac{\sin A}{1 + \cos A}$.

(ii) $\frac{\cos n A - \cos (n+2) A}{\sin (n+2) A - \sin n A} = \tan (n+1) A$.

(iii) $\frac{\tan \alpha}{\tan 2\alpha - \tan \alpha} = \cos 2\alpha$.

and solve $\sec^2 \theta - \operatorname{cosec}^2 \theta + 2\sqrt{3} \sec^2 \theta = 0$.

6. In any triangle ABC prove that $a = b \cos C + c \cos B$, and

$$\frac{a+b}{a-b} = \frac{\tan \frac{1}{2}(A+B)}{\tan \frac{1}{2}(A-B)}$$

7. In a triangle ABC , show that

$$(i) \sin A + \sin B + \sin C = 4 \cos \frac{A}{2} \cos \frac{B}{2} \cos \frac{C}{2}$$

$$(ii) r = \frac{a}{\cot \frac{B}{2} + \cot \frac{C}{2}}$$

$$(iii) R + r = R(\cos A + \cos B + \cos C).$$

8. The sides of a triangle being 5, 12, 13, find the radii of the inscribed and escribed circles; and the three medians.

9. Eliminate α and β from

$$x^2 \sin^2 \alpha - y^2 \sin^2 \beta = z^2, \quad x \sin \alpha + y \sin \beta = v, \quad x \tan \beta = y \tan \alpha.$$

10. Find in terms of α the value of $\cos 4(\cot^{-1} \alpha)$.

11. Express $\frac{3}{5}$ and $\sqrt{7}$ as continued fractions; and find the value of $\frac{1}{3} + \frac{1}{4} + \frac{1}{5} + \frac{1}{4} + \frac{1}{5} + \dots$

12. Find the general term in the expansion of $\frac{1-3x}{(1+5x)^2}$ and of the series $1 + 3x + 10x^2 + 36x^3 + 136x^4 + \dots$

WINCHESTER COLLEGE ELECTION.—July 4th, 1899.

ARITHMETIC.

[N.B.—In assigning marks to this paper, consideration will be paid to the ages of the Candidates.]
Algebraic symbols and methods may be used.

I. A boy is thirteen to-day: how many days has he lived? On what day of the week was he born?

II. Prove that the product of every three consecutive integers is divisible by 6. Also if this product is multiplied by the middle integer, prove that the result is divisible by 12.

III. Reduce to their simplest terms:—

1. $\frac{1332}{1443}$

2. $\frac{£2 \ 19s. \ 2d.}{£7 \ 7s. \ 11d.}$

3. $\frac{7}{8} \div 1\frac{5}{8} - \frac{2}{3} \times \frac{4 - \frac{1}{5}}{1 - \frac{1}{5}}$

IV. A boy spends $\frac{5}{8}$ of his pocket money his first week at school, and $\frac{1}{4}$ of the remainder during the second week, and has 1s. left: how much did he bring from home?

V. Find the value of 40625 of £7.

Reduce 3 fur. 25 p. 2 yds. 2 ft. 3 in. to the decimal of a mile.

VI. Find three square numbers whose sum is 211.

VII. A and B play a match at billiards, 24,000 up, A giving B 7000. After three days play the scores are:—A, 4344; B, 10,672. How far is A behind B on the handicap, and also how far is B ahead of A?

VIII. A can do a piece of work in 10 days, B in 12 days, C in 15 days, each working 10 hours a day. They are all put on the work together and finish it in 5 days. How many hours a day did they work? If £3 is paid for the job, how ought they to divide the money?

IX. A man buys eggs at 7s. 6d. the gross, and sells them at 6s. the hundred. What is his gain or loss per cent.?

X. A bicyclist leaves Winchester for Southampton, and at a quarter past 3 overtakes a friend who is walking to Southampton. The bicyclist arrives at Southampton at 10 minutes past 4, and at once starts on the return journey and meets his friend at 25 minutes to 5. When will the latter reach Southampton?

WINCHESTER COLLEGE ELECTION.—July 5th, 1899.

ALGEBRA AND GEOMETRY.

[*N.B.*—In assigning marks to this paper, consideration will be paid to the ages of the candidates.]

I. Prove that $b+c$ is a factor of
 $(bc+ca+ab)(a+b+c)-abc$.

What are the other factors?

II. If $x-y=2^2$ and $x^2-y^2=8^2$, shew that $x^3-y^3=28^2$.

III. Solve the equation:—

$$\frac{x+1}{x-1} - \frac{x-1}{x+1} = \frac{4}{x-2}$$

One root of the equation $3x^2-2x=a$ is 4, what is the other root, and what is the value of a ?

IV. In changing a sovereign I find that I have received twenty coins, consisting of half-crowns, florins, and sixpences. How many are there of each?

V. The first two terms of an arithmetical progression are $(r^2-2r-1)^2$ and $(r^2+1)^2$. Find the third term and shew that it is a perfect square.

VI. Triangles on equal bases and between the same parallels are equal in area.

If one diagonal of a quadrilateral bisects the other diagonal, it also bisects the quadrilateral.

VII. If two circles touch externally, the join of their centres must pass through the point of contact.

The straight line AB is bisected at C , and semi-circles are described on AB, AC, BC , all on the same side of AB . Shew that the diameter of the circle which touches these three semi-circles is one-third of AB .

VIII. State, without proof, how to find the centre O of the circumscribed circle, the centre I of the inscribed circle, and the orthocentre H , of a triangle ABC .

Prove that the angles OAI , IAH are equal, and that each is equal to half the difference of the angles B and C .

IX. A triangular garden whose sides are 90 ft., 120 ft., and 150 ft., consists of a triangular lawn whose sides are 60 ft., 80 ft., and 100 ft., completely surrounded by a shrubbery of uniform breadth. What is this breadth?

STANDARD OF EXAMINATION.

The opinion has been expressed that the standard of these papers is far too high, that boys of such tender years cannot be expected to do Latin verse, stiff Greek translation, trigonometry, and so on.

Such an opinion can only be reasonably based on one of these alternatives—(a) that boys *cannot* reach such a standard; (b) that they *ought not* to do so.

(a) This must be dismissed, owing to the fact that a paper of too high a standard naturally defeats its own object. An examiner would not be able to judge of the merits of a number of boys, none of whom could tackle a passage set for translation or the mathematical paper presented to them. Of course the same thing happens if the paper is too easy. If one boy can do the paper the standard is not too high.

(b) This it must be acknowledged is a common statement, but it is often used as an excuse for inferior work. If the teaching is inadequate, or the forms too large, such a standard very possibly may not be attainable. The remedy is obvious. Is it fair to the clever boys in a school to keep them down to the standard of their less gifted compeers? It has been argued for example that if a boy knows one book of Euclid well, he has learnt quite as much of geometry as a boy at a Preparatory School should know. He is stopped in his progress and made to do the same work over and over again with other boys who are still learning what he knows. It is said that boys under 14 should not begin Latin Verses, but if they have reached a certain standard in Latin, say at the age of 12, a standard only just reached by other boys of 14, it is unfair to the clever boy not to let him enter upon a new path. The great desideratum is, not that he should stop at some fixed standard, but that he should go on as far as he advantageously can, and not be stinted of intellectual food. Also care should be taken that his work is broad and "all-round," not simply directed to one or two special subjects.

One point about the classical examination is extremely satisfactory—the passages set for translation are entirely "unseen"—a candidate has to rely only on his own knowledge of words and ability to dissect and interpret the piece selected. He cannot, as is possible in the case of prepared books, learn by heart and write down a translation supplied to him by a teacher or a printed

"crib." This principle places the Public Schools Entrance Scholarship Examinations on a far higher and more satisfactory level than Local and similar examinations where papers on prepared books are set.

The general or English papers call for some comment.

(i.) Roman and Greek History are taught at the Public Schools so much more than English History that those papers are best which encourage a thorough and thoughtful teaching of English history. Roman and Greek history may well be left to the Public School period.

(ii.) Geography is rarely taught on the classical side of Public Schools, and therefore this subject should be encouraged at Preparatories, especially physical geography and kindred subjects, as a means of cultivating the observing powers. Hence, the paper that makes it necessary to have learned geography is better than one that makes it merely optional.

Now, of the papers printed above only one is, in the opinion of the present writer, satisfactory in these respects, *i.e.*, the Winchester history and geography paper; the next best is the Marlborough paper; but the Winchester questions are much better chosen.

The second part of the Eton paper may test general knowledge, but is not of a character to encourage a candidate to spend any fair proportion of his time for preparation either on English history or geography.

II.

Are entrance Scholarships useful and beneficial? Let us consider their effect (1) on the individual boy, (2) on the general working of the Preparatory Schools.

There is no doubt that many boys are enabled to go to the great Public Schools through winning Scholarships who would otherwise have to be content with another sort of school altogether. In many cases it is a choice between a local day school or a cheap public school, and a school with all the advantages of Eton, Winchester, or Rugby. Again, the winning of a scholarship will obtain what no payment of fees can secure—namely, a place in the college at Eton or Winchester. Here the whole intellectual standard is of the highest. There are 70 picked boys all in intimate contact, and the effect is undoubtedly most stimulating. The days when scholars were looked down upon have now gone by—they are now the objects of envy and admiration to their less gifted schoolfellows.

A scholar feels that he is saving his parents' income, doing something for them in return for what they have done for him. He knows, too, that more is expected of him, that he is in honour bound to do credit to the school that has given him the advantages of lower fees in return for what he may do for his school. These two feelings must and do help to spur him on to do his best.

It cannot be upheld that, as a rule, the minds of scholars have been developed at the expense of their bodies. They prove

themselves by no means inferior as regards athletic prowess—the 70 scholars at Winchester have often put into the field teams which have beaten the teams picked from 200 “commoners” and from 200 boys in houses. To be one of the 70 at either Eton or Winchester must be considered the proudest achievement of any boy up to the age of 14. Brain power alone will not get a boy a scholarship at these great schools; neither will good teaching alone. He must have a combination of intellectual, moral, and physical strength, besides being well taught.

The same must be said, too, in a less degree for a boy who gets a scholarship at any one of the Public Schools where the competition is not so strong as at Winchester and Eton. It is no small advantage for a boy to fail once or twice and to succeed in the end. He probably learns his weaknesses; he at first trusted too much to his ability and lacked perseverance, or he had worked at congenial subjects and neglected others; he benefits by failure followed by success; valuable moral lessons are taught him by experience.

It has sometimes been said that boys are overpressed at their Preparatory Schools in order that they may gain Scholarships, and that the result of this overpressure is that the boy falls off afterwards and does not fulfil the promise that he has shown. There is no apparent proof of this assertion. As a rule the entrance scholar is found much higher in the Public School than non-scholars of the same age. The head boys are generally scholars, and scholarships at the Universities are almost monopolised by those who have won entrance scholarships at the Public Schools. This is not invariably true, but if a non-scholar gets a scholarship at the University it is generally the case that he was not well taught at his Preparatory School, or that he was lazy there, or that he was kept back by illness or other accidental cause.

The picture that is sometimes drawn of the poor boy taken from games to do extra work for scholarships, crammed with tips up to the last moment, forced to spend his holidays in work with a tutor, overpressed, overanxious, is a picture which has no real presentment in an ordinary Preparatory School. Such treatment would doubly defeat its own object—such a boy would not be at his best in an examination room. No schoolmaster would risk the unenviable reputation of neglecting the health of his boys, his doctor would not allow it, it would do the school much more harm than a possible scholastic success could do it good.

No, the boys who go in for the scholarships have the same hours of work as the other boys, they go through the same course of teaching, they play the same games and often excel in them. Again it has been said that the rest of the school is sometimes neglected for the sake of getting on the scholars. The conditions of Preparatory Schools do not allow of this. Boys are arranged into classes and move from one to another according to their ability and industry just as they do at a public school; the better boys of course get into the top form, and the work of the top

form will depend on the ability of the boys who get into it, but there will be no extra hours for it. Its success will depend on the teaching in the lower part of the school quite as much as in that of the top form itself. The assertion that some Preparatory Schools keep a special scholarship class is ridiculous. Some of the boys in the top form may get scholarships, but it is absurd to imagine that clever boys are picked out right through the school and taught with the idea of their becoming scholars and the rest of the school neglected.

There can be no doubt that the standard of teaching in schools which are uniformly successful in getting scholarships is higher than at those schools where the standard is set by the requirements of pass examinations.

But there is another point to be considered—the case of a boy who has worked well and tried for a scholarship (perhaps several times) and has not eventually succeeded. Is the result bad for him individually? We do not think that it is—surely boys must learn to bear disappointments, to find out that success does not always crown effort. He has probably often been beaten in class and in games, and part of his education has been to bear these defeats and still to go on doing his best.

C. C. LYNAM.

THE TEACHING OF LATIN AND GREEK IN PREPARATORY SCHOOLS.

It is not the primary object of this paper to discuss the arguments as to the superiority of the education given by the Classical side, as it is called, to that of the Modern side, nor to enquire how far Greek is necessary to the proper training of a boy's intelligence before a certain age; what I have in front of me is to describe to the best of my power the methods employed by English preparatory schools for teaching both Latin and Greek to boys somewhere between the ages of eight and fourteen. Yet it is advisable, for the purpose of clearing the ground, to see what the differences of opinion roughly are, and to take a brief survey of the points at issue.

Each system has its advocates and each has much in its favour. With those who maintain that a boy's education should be strictly utilitarian, who consider that French, German, Mathematics and Science, with a certain amount of English, best prepare his mind for his life's work, and who look upon even a minimum of Latin as a waste of time, we need not here concern ourselves; nor must we, even if we agree with them, waste time over those who think Greek the best possible agent for training thought and producing accuracy in the young, and who would insist upon all boys, whether intended for Classical or Modern sides, taking it as a subject until their fourteenth or fifteenth birthday, so that they may have a foundation on which to build the more securely afterwards. The number of preparatory schools teaching on either of these lines must be so limited that they would fall outside our serious consideration. The main point of contention between classical teachers is whether a boy has time for beginning Greek at all with any profit while at a preparatory school. Had he not better make the rest of his knowledge doubly sound, and will he not indeed know just as much Greek at eighteen, if he begins at fourteen, as he will if he begins at eleven or twelve? The curriculum, they say, is overloaded. Supposing that the limited time at his disposal every week is to be curtailed by six or seven hours, now to be devoted to Greek, the average boy will not properly digest enough to satisfy the public schools in English, French, Latin, etc., at his entrance examination. It may, too, appear somewhat unreasonable (as was almost unanimously decided last year by a strong committee of preparatory school headmasters) that a child of twelve should be learning concurrently four languages—English, French, Latin, and Greek,—besides the other subjects universally recognised as a necessary part of his mental baggage. The curriculum of the German Reform Schulen, as exemplified by what is called the Frankfurter Lehrplan, seems to them the sensible way out of the difficulty, and it has much to recommend it. In Germany there is nothing to correspond exactly with our preparatory school. There they have large secondary day schools which undertake a boy's educa-

tion from nine to eighteen years of age, or thereabouts. Of these schools that called the "Gymnasium" teaches Latin and Greek when its pupils are old enough, the "Realgymnasium" Latin but no Greek, the "Oberrealschule" neither; for some years now, however, the authorities have permitted in certain places the experiment of teaching the same elementary subjects, French, Arithmetic, etc., in all three types of school until a boy is twelve years old. This gives him the chance of obtaining a thorough grasp of the elements, and allows his parents time to decide whether his abilities or his future prospects mark him out for the Gymnasium, the Realgymnasium, or else for the Realschule or Oberrealschule; if for the former two, he now adds Latin to his subjects, dropping some of his French hours, until he is fifteen; he then begins Greek at the Gymnasium if he is destined for any studies at the University other than Modern Mathematics, Languages or Science, spending rather less time than before at Latin. It is a reasonable scheme and is said to be answering beyond the expectations of most observers. In many cases those taught in this way have in two or three years overtaken those who began Latin at nine. Possibly Greek may show the same results, though as yet the system has not been on its trial long enough to demonstrate this conclusively. However this may be, Germany is not England. The effect of German education upon the formation of the national character is not wholly such as we should care to see in Englishmen, and our system, whatever its demerits may be, is attracting attention and even admiration abroad. The pendulum is beginning to swing the other way. Representatives from France (where there are loud complaints that their secondary schools tend to produce too many functionaries who work well in an official groove* and too little self-reliance of character), from Germany and from America are constantly visiting us and examining with interest our schemes of teaching and our system of private and public school education. Soon they will be establishing schools on our lines. The case so far then is not proven. That the ordinary intelligence can, under fixed conditions, assimilate in four years what is usually looked upon as the work of six is by no means universally accepted as true. In any case, we preparatory school headmasters are at present not free agents; we cannot each one of us carry out our ideal curriculum. We have no governing body to thwart or control us, it is true; but for all that the guiding comes from above; and, just as the public schools are compelled to bow to the wishes of the Universities and Woolwich, so are we obliged to adapt our teaching to the requirements of the public schools. To them we are in reality responsible; we cannot dictate to them or force upon them our ideas; we can only hope that when we represent to them the difficulties which beset us, they will arrange their system of work so as gradually to lessen them as they occur. As our opportunities of intercommunication increase we find the head-

* "À quoi tient la supériorité des Anglo-Saxons?" Par E. Demolins.

masters of public schools more and more inclined to lend a willing ear to any reasonable suggestions of ours, and it is of the highest importance that they should do so. We are to all intents the lower forms of the great public schools; their rulers now look upon us not only as valuable allies but also as a necessary and integral part of themselves. This very question of beginning Greek they have in reality settled for us. More than ten years ago they realised how crowded was our curriculum; they promised to make arrangements themselves for teaching Greek from the elements and to admit on their Classical side boys without the slightest knowledge of the language. What was the result? A few preparatory schools took them at their word, taught no Greek, devoted the hours thus saved to strengthening other subjects, and finally found out to their sorrow that boys well advanced in French, Latin, Mathematics, etc., were relegated to an absurdly low form at the public school because they knew no Greek! What they gave us with one hand they took away with the other. Besides, the public schools soon discovered that we, with our small classes and less complicated organisation, could teach Greek far more carefully and thoroughly than they with their large forms; they saw that if they continued to be responsible for thorough grounding in this elementary work a larger staff of masters would be required; they acknowledged that we saved them some trouble and with our machinery did the work better. Consequently the *status quo* returned. Nothing permanent has been done. We must for the present accept the fact and the responsibility.

Since, then, a considerable amount of Latin and some Greek are obligatory for admission into a fairly high form of the classical public schools, we have in preparatory schools to consider how best to teach, amid the jostling mass of other necessary work, these two important subjects. It may, perhaps, be well to trace a child's course from the day of his arrival to the time when he first faces his public examiners.

He generally enters between his ninth and tenth birthday, not always well grounded in Reading, Writing, and Arithmetic, and usually knowing no Latin at all. He therefore begins his life in the lowest class. His week's work for the next two years consists of some 28 hours; of this time a considerable portion is given up to English work (History, Scripture, Geography, Letter-writing, and Dictation) French, Arithmetic, and Drawing; the rest to Latin. These ten or twelve hours of Latin include preparation, in which he must be assisted for the first year. For a month his Latin work consists almost entirely of grammar which must be carefully explained, the flexional endings of nouns, adjectives, and verbs (the indicative mood of the active voice) learned by heart, and even thus early he should be practised in adding these to the stems. From the first he must be taught to think. The master should watch and try to identify himself with the pupil, to put himself in his place, to think his thoughts, for so he will best appreciate his difficulties and teach him to overcome them. An experienced teacher (and it is waste of time to hand over the

youngest children to one who is inexperienced) will not find it hard to do this with a form of five or six. A good deal of repetition is necessary and a good deal of patience. An infant learns by imitation and finds his limbs grow stronger by use; he unconsciously observes and practises; and so it is with his mind as he grows older. In a few weeks the class will try short sentences, Latin into English; this interests them, teaches them to apply what grammar they have so far learned, and shows them that this same grammar is not unmeaning nonsense but that it has a definite use. Soon the sentences can be connected and an easy story attempted, until by the end of his first term a clever little lad will have finished the passive voice of the regular verbs and will realise some of the meaning of what he has done; an average boy will know the active voice, while both will also have gained a little experience in turning easy English sentences back into Latin. Very many excellent books are published: Macmillan's *First Latin Course*, Rust's *First Steps to Latin Composition*, Heatley's *Gradatim*, Ritchie's *Exercises in Latin Prose Composition* seem among the best, though every school has its own favourite works, and possibly they are equally good. With the second term comes promotion—a new joy. Ambition is perhaps roused, the boy is keener and more teachable. Still he must be helped in preparing. A master should walk about, see as well as he can that each volatile little boy is occupying himself with the lesson on hand, never answering a question without asking another, so as to elicit thought, but explaining the difficulty when he notices a "check." If possible it should be arranged that the class be taken in the hour immediately following that in which they have been preparing, for boys of this age are very forgetful; certainly it is better that they should not prepare on Monday what they say on Tuesday; some exceptional children are so excitable and anxious about their work that this bothers their brains and spoils their sleep. A little grammar committed to memory should form part of every translation lesson, enough to take up ten minutes in the hearing, and this ought to be carefully explained on the preceding day. About thirty minutes should be given to the construing, which ought to be heard twice over if possible, and about ten minutes to parsing. This would allow fifty minutes in all—ample time, and quite as much as is good for small boys at one stretch. Every member of the class ought to translate part of the lesson and to have his share of questions upon it. Composition should be partly oral, partly written, and it is well to vary the method of teaching it. A master will sometimes have the boys round him and make them in turn translate the English sentences into Latin; this done, he will send them to their desks that they may reproduce the exercise on paper, for thus their memory will be trained and their attention ensured; at other times he ought to explain the principle of the exercise and the rules of which it treats, and let the boys make their own attempts, without further aid, on paper. Variety both excites interest and maintains it. By the end of the second term the average boy will

begin to construe easy continuous pieces with some fluency; by the end of the third he will have read some Eutropius and short straightforward extracts from the Latin authors. All this time he is steadily advancing in the knowledge of accidence, keeping up always the more elementary part of it by revising and revising and revising *ad nauseam*. Yet there is no reason why a well conditioned lad should grow tired of it if he be taught sensibly. A wise master will make the lesson "spin" by an occasional joke (the weakness of which by no means spoils the juvenile appreciation of it), and by illustrations taken from such interesting objects as are within sight or hail.

On looking back upon the year's work one is often surprised to find what a stride has been made by the majority of boys. There will be disappointments of course. Minds, like vessels, have varying capacity, and some leak. Boys with receptive memories and heads upon their shoulders take their removes more quickly than the others. Classical forms ought never in preparatory schools to consist of more than eight or ten boys. Constant circulation is going on; promotions occur every term; and the gap between each class is not wide; it is astonishing to see how rapidly those who were the three or four top boys of Form B in July, overtake in October and run side by side with those who were left at the bottom of Form A.

During the second year the same course is followed, but the work becomes more advanced and the lessons longer. Our representative boy now prepares by himself, though he may apply when in sore straits to his master for help. He attempts one of the many admirable little books constantly being issued, with vocabularies, containing selections from Cæsar, Livy, &c.; he knows by this time what a compound sentence means, how to "keep to the left," watches his tenses, and begins to understand oblique narration and other mysteries, for all the while his composition has been travelling *pari passu* with his translation. They mutually assist each other. In his fifth term he should be ready to try a book of Cæsar, but still with the vocabulary attached, and towards the end of his second year he will arrive at the dignity of a dictionary of his own and will with its help make a very fair attempt at construing the editions of Cæsar and Cornelius Nepos without notes, such as those published by the Clarendon Press. During this last term or so he will have begun to see the reasons for moods, tenses, cases, and while he has still been keeping up his accidence and making it sounder and sounder he will have learned by heart a few examples of the more common Syntax rules, which he will be able to quote as illustrations of instances occurring in his lesson.

The beginning of his third year sees a new departure. If intended for the classical side, he begins Greek; if for the modern, he gives extra hours to French and Mathematics, or starts German. In either case he is ripe for some additional work; he is now between eleven and twelve years of age and can stay up for an hour's preparation every evening. As he has also arrived at the stage when he is supposed to spell fairly well and to

write a sensible letter, he gains two more hours. One of these eight hours may be given to the classical boy for Latin composition, the other seven go to his Greek. This appears to be about the proper time in the lad's career for beginning the new language, when he has a grip of his Latin, a fair working knowledge of its accidence and the power of interpreting a simple author with some success. To fix a definite age for this must be misleading; it is rather a question of capacity, and whether the boy has reached a certain position in the school. There seems to be no great difficulty about the "send-off"; boys will always at first attack a fresh subject with enthusiasm; the thirst for novelty and for investigation is roused. The interest thus awakened must be maintained. When children are shown that the old system of forming their cases and tenses still prevails, and that the grammar is arranged very much on similar lines to that with which they are familiar, they regard the new characters in the light of a pleasant puzzle and worry them out with much enjoyment.

It was noticed above that for a boy of this age to be learning four languages at once was thought somewhat unreasonable. But after all he is by this time fairly grounded in French and Latin, while English is his mother tongue; he can speak this last well enough, can read and write it passably, and will improve by experience without effort. Greek and Latin composition and translation, if properly taught, will give him taste, power of expressing himself, a certain style in writing, and some slight acquaintance with English literature. His history and geography are virtually all that need trouble him now; the public school will be responsible for a higher development later on. To French four hours a week are still given, but a good deal of the drudgery in this is now over, and a boy well on in Latin and Greek finds little that is hard in the modern language, so that he is in reality giving his serious attention to the acquiring of two languages only, and these help one another in a marvellous degree. The same rules of construing apply to both; the verb has to be tracked, parsed carefully, and translated exactly in both; the two languages are synthetic and of kindred origin, while their points of similarity and difference are full of interest and instruction. It certainly appears that the commencement of Greek study at this age is a distinct gain from many points of view, in spite of instances which may be adduced where exceptional intellect has in maturer years quickly overcome all difficulties and grasped, as it were by intuition, the "mind" of the ancients. The chief importance is the mental discipline, the necessity for the closest care and watchfulness, the training in accuracy which Greek gives and which is taught equally well perhaps by nothing else except Euclid. The bracing of the faculties of the mind and the enlargement of the mental scope are more the objects of education than marketable information and the effect of this bracing will remain behind in after life even when the Greek itself may be merely a dim recollection.

But to return to our pupil. He is all keenness at first about

his Greek alphabet. A liberal use of the blackboard is of importance to begin with, and a month's practice in reading, copying, learning the terminations, etc., is necessary, very much as it was with his first steps in Latin. He should now try sentences graduated in difficulty, exemplifying the grammar as he learns it. Some schools devote a whole term to the learning and practising of grammar, allowing no translation whatsoever, but grammar pure and simple palls upon the appetite, and it is remembered better when applied. There are several excellent little works in use for this purpose, of which Underhill's seems to me to be one of the best, and, though there is no ideal grammar yet published, several are quite good—Wordsworth's, Rutherford's, and for more advanced scholars, Abbott and Mansfield's, and Parry's, than which last there is still, I think, no superior. Training of the kind just mentioned is sufficient for the first term; by the end of the second term a boy should be able to construe short connected pieces such as are given in Heatley's "*Græcula*," and before the year is out he will make a fair attempt at Morice's "*Attic Stories*" and selections from Xenophon. He must, during his second year, begin to use his lexicon, with Xenophon's *Anabasis* and well-chosen extracts from Thucydides, and before this year is over, an ordinary boy will reach the standard of easy Greek play. All this while his knowledge of accidence and Syntax ought to have been growing steadily, following precisely the plan he followed with his Latin grammar. And meantime, of course, his Latin has been progressing, and has been, it may be unconsciously, assisting his Greek; parallel examples of Syntax in both languages might be asked when either of the two requires this kind of illustration, and Greek equivalents for Latin idioms as they occur in reading; this will keep the two languages side by side. For some terms now, since we started him in Greek, the boy will have been making steady way through his Latin authors; he will probably know something of Phædrus, Ovid, Livy and Virgil, and perhaps a little of Horace. A change of book and an introduction to a new style of writer is of great importance.

And his composition has come on quietly. By stages he has passed through elementary books—one of the most searching and valuable of which is still the old Arnold, if taught sensibly and with discrimination—until he has tried his hand at connected prose. He has learned the laws of scansion for the sake of understanding what Ovid and Virgil mean, and perhaps he is some way on in the technical art of "making verses." This ought to lead him on to "writing verse." If a boy is to enter his public school on the classical side he should not be allowed to omit Latin verse composition from his course of training, for without it he will neither be well equipped for the next few years of his life, nor if he should happen to take a high place in his entrance examination, will he maintain his position at some schools. He must possess more than a mere elementary knowledge of metre and of prosody for the proper understanding and correct rendering of the Latin poets. The time is not

wasted at any rate, as verse-making improves a learner's accuracy and assists his prose, and as the terms go by the learner will show whether he has any faculty for, or leaning towards, higher scholarship. During his last year at a preparatory school he will be capable of trying to turn into Latin short pieces of English narrative and simple poems. He becomes familiar with idioms, is on the alert, gains facility in translating, and perhaps reaches a standard high enough for a competitive examination, if that is an object to him. But probably the most important result of all is shown in the improvement in the lad's taste. He is forced to dwell on the meaning of English lines in a way in which otherwise he would not have cared to think of them, he understands allusions, he begins to appreciate the value of epithets, of emphasis, of the position of words; he sees through the poet's intent and, even if his attempt to turn these into the corresponding Latin idiom is feeble and stilted at first, he is the better for trying and will improve. Whether verse-making is a knack or not—and of course some boys take to it more readily than others—it is a knack that must assuredly argue a certain acquaintance with the language. He is a better classic than he would have been had he left verses alone. For Greek prose and verse there is no time; a master must be content with a slight grounding in the rendering of English sentences into Greek.

And now the boy's course is completed. He is somewhere between his thirteenth and fourteenth birthdays, and ought, save under exceptional circumstances, to "move on." If he has been reasonably diligent and has acquired in these four years the habit of reflection, he ought now to find no difficulty in taking his removes easily and without undue effort until he is ready for the University. No mention has been made of scholarship boys—and purposely. Their education is identical with that of the rest of the school. There should be no pressure and no specializing. The only difference is this, that a clever boy will assimilate knowledge more rapidly and win his promotion from class to class more regularly than his slower companions, so that probably by the time he is eleven years old he will be in the same stage as the ordinary boy of twelve. He must not be sacrificed to the latter, nor must the latter be sacrificed to him. For such promising children there ought to be an extra form at the top of the school into which they can be drafted, if they can without any strain reach it in the regular course of work. A special master is usually set apart for this form in schools that care to undertake this higher standard of work; the embryo scholars thus have their fair chance of distinguishing themselves without any detriment to the rest of their schoolfellows, and without any neglect on the masters' part of the rank and file.

It is scarcely necessary to add that the head master must find time to revise every class in the school now and then. Whether he is engrossed in his own form-work, or in correspondence, or in the general supervision of the establishment, he must make for himself opportunities of seeing that his schedule of work is being

faithfully carried out in all its details, or abuses will imperceptibly creep in.

Such is the scheme of education, differing in some details but in the main following the lines sketched above, which is carried out with more or less success by our classical preparatory schools. That it is both practical and practicable, and on the whole most satisfactory, I for one can affirm from an experience of over 25 years, during which nearly 800 young boys have passed through my hands. We are accused of not laying sufficient stress on intellectual standards but of judging excellence of character too much by physical development; we contend that it is the aim of those who are moulding the characters of the youth of this generation to cultivate as far as rests with them the perfect ideal, physically, morally, and intellectually.

Why then, objectors say, is there so often a poor result? What is the cause of the frequent failure of boys to qualify for the moderate standard required of them on joining their public schools? Is there not something radically wrong with a system which teaches so feebly that those who have been for nine or ten years brought up upon it find a difficulty in passing the Matriculation Examinations at Oxford or Cambridge? This last objection may be answered at once by the assertion that the fault lies with the individual, not with the system, for precisely the same system provides sixty boys every year—the scholars selected at Eton, Winchester, Rugby, Charterhouse, Harrow, &c.—who could with certainty pass Responsions or Little Go at the age of thirteen, and a vast number besides, unsuccessful candidates for these school honours, who do not fall far short of the same standard! But of course we see occasional failures, perhaps five in every hundred. In all schools are found instances of boys so hopelessly crass, so utterly incapable of taking in an idea or of retaining it, if understood, that one wonders sometimes whether in spite of the endless trouble bestowed upon them they will ever be fit for anything in after life but shooting partridges. Others are so much spoiled and pampered before they reach school that it takes their unfortunate masters a long time to break through the crust which indulgence or self-complacency has formed round them; but these cases are happily not numerous. There exist other causes for failure, of which the following are among the most obvious:—

1. Boys often enter their preparatory school too late and leave it too early. The reasons for their late arrival are doubtless excellent, being chiefly domestic ones. The child is delicate, and requires home care for a little longer; he is an only son, and cannot yet be spared; or he has a younger brother who is being educated with him at home, they cannot be separated, and will be sent to school together; or he finds great difficulty in reading, and must have special attention still for a while. Not only does their work suffer but most often they are also sadly undisciplined when they do appear, frequently at about their eleventh birthday—and then it not uncommonly happens that just as the boy is passing his thirteenth birthday, the public school master,

at whose house his name is entered, sends for him. He has a sudden vacancy; unless this is accepted, it may be doubtful when the next will occur; the parent is panic-stricken, and the lad goes. He has had two years of elementary Latin teaching and no Greek, for it has been already shown how much can be soundly grafted into the average boy in that period of time.

2. Another reason for failure is that the forms at the preparatory school are sometimes too large. This naturally means that the masters are, in proportion to the number of boys, too few. There must be, unfortunately, in all matters of education, a commercial side. A great many excellent schools consist of from 30 to 40 boys; every care is lavished upon them, their food must be, if simple, plentiful, well-cooked, and of the best; comforts are provided for them as though they are at home, and their masters for the most part must be University men. Yet it is difficult for a head master to provide all this on a gross income of 3,000*l.* or 4,000*l.* a year, and at the same time reserve for himself any adequate compensation for his outlay of capital, his wearing work, and his anxiety. Little wonder, then, that he denies himself a necessary master, and, to make up for the self-denial, adds two or three boys to every division. It is unsound policy, but he seems compelled to do it. Let him raise his fees, he loses his boys. Larger schools can afford to be more extravagant as to their staff, and need not suffer in this way, but the strain is severely felt in many of the smaller ones, though in most cases it is well known that those in command sacrifice their own pecuniary advantage for their school's welfare, and provide a staff almost beyond their means.

3. But perhaps the most obvious cause of all is the lack of system in the work, owing to a frequent change of assistant masters, who come and go with regularity every term. This is fatal. Any continuity in the teaching under these circumstances is impossible. It is partly a question of economics again, but it ought not to be so; even if the number of masters be few, there is no reason why these few should be perpetually changing. The fact implies the want of some necessary attributes on the part of the head master—either he chooses his men badly, or he is inconsiderate, or he underpays. The question is important, as it affects the welfare of the boys and the future of an able and self-denying body. Many men, immediately on taking their degree, accept a post at a preparatory school that they may have a breathing space in which to look round them. They have a year to spend before the serious business of life begins, and this they give to useful and agreeable work and games, but without any serious idea of making education their profession. These birds of passage require little consideration; they ought not to be encouraged or even admitted. Others come for the experience, intending in due course to carry on schools of their own, or, at any rate, to make teaching their life's work. A head master ought soon to discover who of these will be valuable to him, and, having found a good master, he ought to do his utmost to retain

him, for his worth is "above rubies." The head should make it worth such an assistant's while to stay with him by studying his happiness and comfort, and by gradually raising his stipend, so that he may and can, if he wishes, provide himself with an annuity after a definite number of years' service. When a master has given the best years of his life to the interests of the school, the school ought not to desert him when he is past embarking upon a fresh career. But this is a wide subject and cannot fully be discussed here. It will be sufficient to add that useful masters will stay and perform their work ably and loyally for fifteen, twenty, or twenty-five years, and yet remain young and boyish enough to share in their pupils' pursuits and pleasures. Fortunate is the school which manages to keep them !

Other causes there are, too numerous to dwell upon—interruptions owing to illness (which the public schools scarcely seem to realise sufficiently), over-devotion to cricket, supineness on the part of the authorities, and so forth—some unavoidable and some preventible, but enough has been written upon this subject to show that anything which interrupts the general swing and continuity of the school routine will sensibly affect the results of its work. It may be urged that not only the Latin and Greek but all other branches of work will suffer from similar reasons. It is true; but they will not suffer to the same extent. Classical teaching, to be sound, must omit nothing; there must be no gaps, and in it a proper and regular order of proceeding is generally accepted. In other subjects this is not always the case—the third book of Euclid, for instance, requires very little acquaintance with the second, which can be shelved for a while; quadratic equations in Algebra are taught either before or after simple problems, and so on; but it will not conduce to ultimate success if we attempt royal roads or short cuts in Latin and Greek. It is on this account of the highest moment that as few breaches as possible should be made in the school's regimen and scheme of education.

Much could be added on this most important subject, but possibly more than enough has been said to justify the existence of our preparatory schools as classical nurseries for the great schools of England. In spite of occasional failures and of evident imperfections, their value is being more and more recognised and acknowledged every year, and if the advance in higher secondary education, distinctly visible in this last quarter of a century, can be satisfactorily established as resulting from their foundation, development, and present condition (as, indeed, is commonly allowed), they clearly have a *raison d'être* as well as a claim upon the paternal interest of the public schools and the gratitude of the British parent of to-day.

C. ECCLES WILLIAMS, D.D.

THE TEACHING OF THE MOTHER-TONGUE IN PREPARATORY SCHOOLS.

The teaching of English will be considered, for the purposes of this Paper, to comprise instruction in—

- (a) Reading, Spelling, and Writing;
- (b) Original Composition and Reproduction ;
- (c) Language (Grammar, Word-formation, etc.);
- (d) Literature.

The average age at which a boy enters a Preparatory School is about ten, and by that time it might reasonably be expected that he should have been taught at home or elsewhere to read correctly without having to spell words, to spell and understand the ordinary words he meets, and to write neatly. Experience seems to show, however, that this standard is reached only by the few. The increase in wealth and luxury has had a noticeable effect on the early education of children. They are more indulged than formerly, and parents are unwilling to subject them to strict rules or press them to do what they dislike. Their education is put off as long as possible, and, in consequence, when they are found to be unmanageable at home, and are packed off to school, they are some two years behind the standard which the average boy, with proper training, can easily reach. Preparatory Schoolmasters, therefore, find themselves faced by this difficulty. If they devote a sufficient amount of time in the lower forms to these elementary subjects, it is difficult to bring boys up to the classical standard expected by Public Schools. On the other hand, if they take boys as they find them, and allow them to pick up what they can from the unsystematic efforts of individual masters, though the abler boys will probably get along well enough, the average and slow boy suffers all through his school life.

A study of the returns made by the schools reveals the fact that, as might be expected under the circumstances, the most remarkable differences of practice exist. The time given to all subjects included in this paper (except writing) varies from half an hour a week to twelve hours or possibly more. All schools seem to recognise the necessity of giving some time to spelling, but several give none to composition, language, or literature, and the majority give about four or five hours a week in the lower forms and one or at most two in the upper. In one school a spelling lesson is learnt every day by every boy during his school course, in another half an hour a week is considered sufficient. One master gives four hours each to composition, language, and

literature. Many others write that these subjects have no fixed place in their curriculum, or that they are crowded out by the necessities of Public School examinations. Truly there seems no fear that Secondary Schools in England are likely to suffer from the monotonous uniformity of the German system, which some writers dread. The general impression left on my own mind by a long Public School experience and the examination of the returns, is that English is neglected in favour of those subjects which are showy and easily tested. And yet it seems the most ridiculous platitude to assert that until a boy can read the mother-tongue easily, can understand and assimilate what he reads, and even express his thoughts with reasonable fluency, he is not fit to start on the difficulties of Latin prose, or, indeed, the preparation of anything but the merest rote work. I imagine that many teachers, like myself, must have come across boys reading Virgil and Cæsar, to whose minds the English translation conveyed scarcely any definite idea. I am quite sure that no one can examine an average form in a Public School in history or one of the kindred subjects without noticing that the power of expression of thought and interpretation of fact is very low in comparison with the amount of names and facts which the memory has stored. It may of course be replied that the memory of boys is strong and their reasoning power weak, and that we are wise in making the utmost use of the power while we can. But granting this proposition to the full, there is obviously another point of view. We train what is naturally strong and neglect what is naturally weak. Whether the flood of facts which the sponge-like mind of the boy so easily absorbs is worth very much to him may be an open question, but of the value of a well-trained reason there can be no doubt, and what is (to the little boy at any rate) the only possible basis for thought, namely, his own language, this, oddly enough, is the subject whose acquisition is, as a rule, left to chance. I am anxious not to exaggerate the weakness of our Preparatory Schools in this respect. I know that in some schools English is most carefully taught. I know that the clever boys, in any case, do not suffer much, but I feel very strongly that, as a rule, the value of systematic English teaching is not appreciated.

The subjects will now be considered in detail.

(a).—READING, SPELLING, AND WRITING.

Nearly all boys can read a little when they come to school. It lies outside the scope therefore of this paper to consider methods of teaching beginners.

On the other hand, the minority only can read easily and understand what they read. Much time, therefore—not less than six hours a week—ought to be devoted to reading in the lower forms, and necessarily therefore to reading aloud. These lessons can be made most interesting and instructive if a suitable reading book is chosen. For a good teacher can here show his very best powers. By bright oral questioning he can

not only be teaching vocabulary (a most important point), spelling, and easy grammar, but he can also be training his boys to grasp the real meaning of every passage they read.

In their use of these lessons, the Germans are far in advance of us. They ask many more questions on the subject-matter of a passage than is usual in our forms. They demand grammatical and well-expressed answers, and so prepare the way for the teaching of composition. The mistake made, in my opinion, by most English teachers is to require only answers in one word or short phrases. They are so anxious to be smart, and bright, and vigorous, that the interchange of question and answer is like the rattle of musketry fire. No doubt it demands more skill and preparation on the part of the teacher to keep a class interested in the slower and more elaborate answers required by the German teacher. It is true also that it is quite possible to err on the other side, and to waste time and cover too little ground. But no one can study the reports on the lessons given on the mother-tongue in Germany without feeling that we have much to learn from them.*

The English reading lesson, therefore, should be to the little boy at a Preparatory School his most important task. It may be combined with history or geography teaching, but its main purpose should always be to train him to read, think, and express his thoughts in his own language. He should also, surely, be taught to manage his voice so that it may express the meaning he wishes to convey. Very diverse opinions are held as to the desirability or possibility of training boys in elocution, but, whatever view be taken, it must be right to let them hear the difference between good and bad reading, and detect some of the principles which underly that difference. How pleased a boy is, for example, when he first discovers that if he holds up his voice he implies that there is more to come, if he drops it that he has finished his sentence.

Spelling is, as a rule, not neglected at Preparatory Schools, though here again there is little agreement among teachers as to methods. In some schools lists of words are learnt every night, in others the use of a spelling book is condemned. One headmaster writes that dictation is hopelessly unscientific, others that dictation lessons are given in all forms in their schools. But thanks to Government examinations there is a consensus of opinion that in one way or another spelling should be taught. The practice which seems to me most reasonable is to make boys (a) copy out correctly all words wrongly spelt; (b) learn words from a spelling book, looking out the meanings in a dictionary when necessary, and framing sentences to illustrate their use; (c) collect a few leading rules; (d) look out for derivations. I am inclined to agree in the condemnation of dictation. For the good speller it is waste of time, for the bad it is a confirmation, for the time, at least, in error.

* Vide the admirable paper by Mr. F. H. Dale on *The Teaching of the Mother-Tongue in Germany*. Special Reports on Educational Subjects, vol. i., 1896-97. London: Eyre and Spottiswoode.)

Writing is well taught, as a rule. The prevailing style is the upright. It has the merit of legibility if not of beauty. There is, perhaps, a tendency to crush out individualism in the endeavour to secure uniform excellence. It is possible to stretch the desire for neatness too far. I have known much time wasted by teachers whose pride was that their boys' exercise books should be spotlessly tidy. Two further points occur to me as the result of my own experience. Copies are of little use in the case of confirmed bad writers. It is better to try and effect an improvement on the lines of a boy's own hand. Secondly, bad writing is often caused by misuse of the top joint of the first finger. The curve should be convex above, concave below. Otherwise, pressure is thrown on the ball instead of the tip of the finger, and control over the pen is lost.

(b).—ORIGINAL COMPOSITION AND REPRODUCTION.

This subject is rarely satisfactorily taught in English schools, and often entirely neglected. The weekly theme, marked frequently "by impression," is a poor substitute for the admirable methods of the German schools. The fact is there is no more wearisome task imposed on the teacher than the conscientious correction of ungrammatical and unidiomatic English. Nor is such correction, however careful, of much value unless some minutes are given to each boy individually. In few English schools is more attempted than this, and in a very large number, judging from the returns, the subject does not form part of the curriculum. In Germany, from the very first, composition is systematically taught. Beginning with oral lessons in reproduction from the reading-book, the pupil is gradually led on to clothe in his own language ideas supplied to him by the teacher, and only in the higher classes is he expected to find his own material. Fluency in speech is considered to be an essential preliminary to fluency in writing. When a child can readily answer in well-chosen language, he is then, and then only, allowed to commit his words to writing. The result of this training is that in vocabulary and power of expression the average German schoolboy far outdistances the English. On the other hand, it is possible that such a system may, if pushed too far, render a boy over-dependent upon outside help and weaken his originality; but the true mean can surely be found.

A practice which I observe several teachers recommend in their returns, and which personally I have found of considerable service, is to set frequent papers on subjects like history, the answers to which are criticised and marked as composition. In this way, without excessive expenditure of time, at least on the part of the boy, a good deal of composition may be taught. I feel sure that in history and geography lessons with little boys too much attention is generally given to the acquisition of facts. Little papers are constantly set to test industry, and in this way (to repeat what I said before) the memory

which is naturally strong is assiduously trained, and the powers of reflection and expression which are weak are comparatively neglected.

(c).—LANGUAGE (GRAMMAR, WORD-FORMATION, ETC.).

Elementary grammar and analysis are taught in most schools, but mainly, as I gather, with a view to Latin Prose and construing; that is to say, boys learn to pick out the parts of speech, the subject and predicate, the principal and dependent sentences, and not much more. I fancy few schools use a text-book, and certainly only a small amount of time (about an hour a week on the average) is given to the subject. I am inclined to think that in this respect we are right. It is easy, as I have seen, to spend many precious hours on the elaborate writing out of analyses of complicated sentences without corresponding profit, and fluency in speech and writing, which are the main objects in view, are retarded rather than aided by reference to rule. At the same time, it is obviously necessary that the elements should be thoroughly mastered. I believe many boys go through their school life without a real grasp of the difference between an adverb, conjunction, and preposition.

With regard to word-formation and the history of the language, it can only be said that they are rarely taught at all. An individual master may have a taste for etymology, and encourage his boys to look for derivations, but so far as I am aware, systematic teaching of the subject is almost unknown. Yet taken as an alternative to literature for a term's reading the subject is most stimulating. It widens a boy's vocabulary, and makes him more accurate in his choice of words, and may further lay the foundations of a life-long interest.

(d).—LITERATURE.

The returns here speak for themselves. "No time;" "crowded out;" "not taught." These phrases occur again and again. A few schools teach the subject systematically, but, generally speaking, it is neglected.

I should like to consider whether it is desirable to teach literature at all, and, if it is so, whether the subject is important enough to override the plea of "no time." Is it desirable to teach literature at all? There is by no means universal agreement on this point. The headmaster of Haileybury in the first number of the *Preparatory Schools Review*, expressed the opinion that English teaching should be confined to grammar and language, and should not include literature.

Again it is often said that by bringing literature into the classroom you take away half its charm; that holiday tasks and term extras have killed the love of the Waverley Novels, and that Shakespeare and Tennyson will suffer the same fate if they come under the same blighting influences; that the boy regards as a task what he would else value one day as treasure trove; the master if enthusiastic finds that he is casting his pearls before swine. I believe this point of view to be quite wrong. If boys

care less than they did for the Waverleys (and I am not certain that this is the case), it is because more highly-seasoned dishes are offered them. If an English lesson implies learning of notes and analysis of sentences it will probably be considered as only a trifle preferable to the same task in a foreign language. If a man expects young boys to care for his pet passages of Keats or Wordsworth he will probably be disappointed. To make a literature lesson attractive and valuable, three conditions are essential: the book must be suitable, the aim purely literary, and the teacher really keen.

The book must be suitable. Boys like narrative poetry and little else. The small boys of ten or eleven prefer their stories short. For them Macaulay's Lays, Aytoun's Lays, modern ballads, such as Scott's and Campbell's, with a few of Tennyson's and Browning's, will afford an ample choice. There are, moreover, plenty of suitable collections from which to select. As they get older, the longer poems of Scott, "The Lay" and "Marmion" especially, can be read. Personally, I have found nothing better than some of the "Idylls of the King," Geraint and Enid, Gareth and Lynette, and the Coming and Passing of Arthur. Some of the stories from "The Earthly Paradise" may be taken as a change. If a man has a taste for the old ballads they can undoubtedly be made interesting to boys, but the vocabulary is a difficulty, and there is not much teaching matter to be found in them. "The Golden Treasury" collection of ballads is, I think, the best, though that in "The Chandos Classics" is more complete. Lastly, for boys of fourteen or so, an occasional play of Shakespeare is a great treat.

I have not included any prose works, because I have never been able to find any that are really suitable, except perhaps Lamb's "Tales" and Kingsley's "Heroes." It is possible that something might be made of Stevenson.

The aim must be literary. If you wish to teach your boys vocabulary, grammar, language, take a "reader," or the history or geography in ordinary use—anything rather than the poetry you want to make them care for. Here the first object is to create a taste, not to teach a language. Inadvertently they will, of necessity, widen their vocabulary and acquire grammatical knowledge; but these are, so to speak, bye-products. The words must be explained, the construction elucidated, but only with the ulterior object of making boys feel what the poet desires them to feel. And so, if I were teaching the "Lay of the Last Minstrel," I should care little if my boys forgot what an *aventayle* or *heriot* was, or did not understand the allusion in "the warbling Doric reed," if only they had felt the glamour of the midnight tryst at Melrose, or the pathos of the minstrel's prayer—

"By Yarrow's stream still let me stray!"

Such is the first and most important end in view, but there is another. Not only has the aim of the poet to be revealed, but also the means by which he accomplishes it. With many boys the sense of rhythm is dormant and has to be awakened; they

hardly appreciate what rhyme is, much less metre. Again, the tricks of the trade, such as alliteration and onomatopœia, are to them a delightful new study. Similes, metaphors, epithets may all be collected and examined. With a writer like Tennyson, one has an inexhaustible store on which to stand; and I know nothing which an intelligent boy enjoys more than his first glimpses into the workshop of the poet. I need hardly add that he should be encouraged to learn by heart, to compare, and quote, for no teacher is likely to omit these points.

The teacher must be keen. To make history really successful a man must have read widely and be master of his subject. A geographer, Professor Geikie tells us, needs to know something of most of the sciences, and to have travelled widely; but most of us have sufficient stock-in-trade to interest boys in literature. But one has to remember this: it is easy to sneer at the small priggishnesses and raw crudities of boyish taste, but those who have learnt to look for results beyond the immediate present know that in these paltry seedlings lie the promise of a good harvest in the future.

Since this paper was written the Master of Marlborough has spoken on the subject at the Head Masters' Conference, and I am pleased to find that he is substantially in agreement with the views I have expressed.*

But, in conclusion, I should like to point out that, judging from the experience of the past, one may infer that the Preparatory Schools will not seriously move in the desired direction unless the Public Schools take the lead, and after setting their own houses in order, require from boys who come up for entrance or scholarship examinations, some knowledge of their mother-tongue and some power of expressing their thoughts.

H. C. TILLARD.

* The Master's paper on this subject appeared in the *School World* for February, 1900.

THE
TEACHING OF HISTORY
IN
PREPARATORY SCHOOLS

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THE TEACHING OF HISTORY IN PREPARATORY SCHOOLS.

The Preparatory Schools of this country make the study of history a necessary part of their curriculum. It would be strange if it were not so. Almost all who have taught history to boys and girls agree in estimating its relative value very highly. It is not only that a boy ought to be acquainted with the facts of the history of his own country and to know something of the lives and doings of her great men, his own fellow-countrymen, and of the way in which the "ordered freedom" was attained which he and his enjoy. A boy may even add to his knowledge of English history a fair acquaintance with the history of Greece and Rome or with the outlines of European history; and yet we have not reached the final reasons which make the study of history in its various developments so invaluable to boys and girls of all ages. It is much the same with History as with Classics. The actual knowledge obtained in the study is invaluable to some, useful to many, useless to none; but the incidental benefits which result to the boy or girl student in the process of learning are invaluable to all. It strengthens memory, the best of servants. It develops and expands intelligence to a remarkable degree, which is a key to unlock the treasures of knowledge. It arouses and stimulates imagination, which is the handmaid of student and literary man and statesman and scientist, and the avenue to the purest delights of life. It awakens enthusiasm, the salt of character. These are no mere fancies, but sober truth, attested by evidence; and, if so, it is scarcely wonderful that most schoolmasters value the study of history in their schools and give it as large a proportion of time as present circumstances permit. The wonder is that history is not valued more highly and more systematically taught than is actually the case.

It is the object of this paper (I.) to state in concise form what the Preparatory Schools are actually doing at the present time for the teaching of history; and (II.) to consider the whole subject of historical teaching in Secondary Schools, with special reference to the question whether any and, if so, what improvements may fairly be suggested in the methods adopted by preparatory schoolmasters.

(I.)

I propose in the first place, to set forth in detail the actual work being now done in the department of History by a

typical section, more than 120 in number, of the Preparatory Schools. The subject will fall naturally into a statement of time given to History in the school-week, of the subjects and methods adopted in teaching it and of possible means of improving them, and of the experience which teachers have gained as to its relative usefulness.*

The time spent on historical teaching varies but little in the different schools. Only two schools devote less than an hour to it in the week. Eight schools give three hours. One finds time—happy school—to assign no less than from four to six hours to the subject. But the vast majority find it impossible to give more than two hours at the outside, and perhaps it would be nearer the mark to say that “from one hour to two” is the time usually allotted to history in our Preparatory Schools. For the most part the work is done “in class,” less than half of the schools under consideration sparing any time for “preparation.” Not that this average of an hour and a-half is any gauge of the estimation in which the subject is held; for a large number of teachers, while speaking with remarkable conviction of its value, complain that their hands are tied in the matter, and that they cannot give as much attention to it as they think it deserves for this very significant reason—*because it does not pay in subsequent examinations*. Many would give more time if they could.

In all schools without exception English history is very properly the starting point; more than seventy schools add a certain amount of Greek and Roman history for their older boys.

In the majority of schools a text-book (usually Gardiner's *Outline of English History*) forms the basis of instruction supplemented by the use of wall maps and blackboard, sometimes by lantern slides, relief maps, and models, in one case even by rubbings of brasses. Whatever may be thought of text-books

* With a view to arriving at a clear idea of the nature of this work, a series of questions was addressed to each headmaster, the answers to which have been analysed and tabulated. These questions were seven in number, directed to finding out—(a) what was the time allowed for history, both in preparation and in form; (b) what was the proportion of marks allowed; (c) whether English history only was taught, or Greek and Roman also; (d) what was the method of teaching, whether by text-book or *viva voce*, and in either case what aids to such teaching were in common use; (e) whether boys were allowed or required to take notes; (f) whether it was the practice to deal with large periods or short; and (g) what was the experience of each headmaster as to the utility of history, as an item in the school curriculum, in strengthening memory and quickening intelligence. Each headmaster was further invited to give information as to any special method employed in his school, and to state his views regarding the subject in general, with special reference to any improvements that might be possible in the methods of teaching it, whether immediately or in the future. The answers received to these questions have in the main been exact, thorough, and thoughtful—in some cases they were more than this—and it has consequently been possible to arrive at a very definite conclusion as to what is being actually done in our schools. And one satisfactory conviction, at any rate, forces itself on one's mind, after weighing the purport of the evidence, viz., that, whatever defects there may be in the system of secondary education as far as historical teaching goes, the fault does not lie at the door of the Preparatory Schools.

in themselves, it is evident that their utility will greatly depend on the way in which they are used; and it may be stated at once that all the evidence goes to show that they are for the most part used in Preparatory Schools with conspicuous common sense—not followed slavishly, nor utilised merely as a mine for “questions” to be answered “in terms of the book,” but rather treated as guideposts to the road or (to put it differently) as “pegs” on which to hang all sorts of illustrative matter.

Some few schools use only oral teaching in the first instance, confining the use of the text-book to “reference” and “revision”; while the accuracy of the knowledge thus gained is tested at short intervals by question papers and essays, or, if note books are in use, they are looked over, corrected, and marked every week. Four schools confine themselves to oral teaching, supplemented by map and blackboard. Of course, whether a text-book or oral teaching be the pivot of instruction, constant questions to individuals in the class, now one and now another, form a large part of any sane teacher’s method.

The above are briefly the technical details of the system in vogue. Anyone with eyes to see will see in them a proof of the vast amount of trouble, thought, and work which is bestowed on the subject both by masters and by boys. But satisfactory as this is, it is not all. The evidence shows that a fair proportion of men are not only deeply interested in their historical teaching and value its effects highly, but that their thoughts are constantly on the stretch to arouse their boys’ interests on parallel lines and to stimulate intelligence. They know that “Cram” is deadly, and that the main object of historical, as of other teaching, is to induce and train the taught to use his own mind himself. In one case a headmaster goes over the subject for the next term with his assistants beforehand, talks it over with them, discusses difficult or important points, and suggests methods of teaching. In another a lantern lecture is given weekly during the winter terms, the subject varying—sometimes historical, sometimes connected with art or natural history, or current events—new slides being provided on each occasion. In a third instance, four historical debates are held in the winter, the materials for which are entirely drawn from previous history lessons. “Boys take notes, being told long beforehand what the subject for debate will be. They are thus on the look out for ‘points’ and are led to think for themselves about cause and effect, traits of character, morality of actions, etc. Finally, they are ‘coached’ out of school in the best way to produce their arguments. Masters are present at the debates, and always take part.”

In a fourth case a “Calendar of Great Events” is hung up in the schoolroom, and the day’s lessons are begun with a few questions on “the Event of the Day,” such as “Independence Day” on July 4, or the battle of Trafalgar on October 21. Boys who are keen read up “the event” out of school; and (after questions have been asked and answered) details are added which would not ordinarily be within a boy’s reach. This is

found most useful as connecting "events" with "days," and thus helping the memory to master dates. These are only specimens of what is being done in some schools and might be done in more, and it hardly surprises us that, with guides and helps such as these, one master is able to assert roundly that "the history lesson is the most popular in the week."

After what has been said, it seems almost superfluous to add that Preparatory Schoolmasters, with rare exceptions, recognise heartily the good effect of historical study on their boys' minds—the dissentients, in fact, could be counted on one's fingers. Briefly, the masters of the schools under consideration as a body are convinced that—apart from the actual knowledge gained—the process of gaining it helps to strengthen memory; that it is one of the most effectual means of developing intelligence and training judgment, and that it awakens imagination. What more could be said to justify any branch of study?

(II.)

I pass on to consider the question of historical teaching in Secondary Schools generally, as affecting the same question in Preparatory Schools; and we are faced at once by a difficulty which seems for the time insuperable—there is no unity or continuity of teaching. All intelligent men since Arnold's day believe in the unity and continuity of History itself. It would seem to be a corollary to this, that the teaching of it should have a unity and continuity of its own. But it has not. Every man is a law to himself. As a rule each man chooses his own period and adopts his own method. It is a purely empirical system. And in this way history suffers as compared with classics and mathematics. By "accident," or "rule of thumb," or "the nature of the case," or "providentially," they *are* taught on something like an understood and common system—the circle widens and the depths deepen naturally, as the boy grows older and passes from Preparatory to Public School and from Public School to University. But it is not so with history, which is consequently at a disadvantage and lightly regarded by many who ought to be wiser. The immense amount of good honest work being done in Preparatory Schools might be even better done than it is, if the whole subject were treated systematically and co-ordinated from bottom to top. In saying this I would not for a moment be supposed to be suggesting any cast-iron system to which every teacher, *volens volens*, must adhere—parallel to the system of the legendary French Minister, under which every boy in every school in every town and village was doing the same thing at the same moment in the same way. That would be to bow down to a fetish with a vengeance, and would hamper if not destroy all originality and freedom. Rather I would suggest that the greater systematization of secondary education which is on foot will probably make a continuity of historical teaching easier of realisation, and that meanwhile more consultation and common action between the headmasters

of Preparatory and Public Schools, by means of their respective committees, would pave the way for a continuous "ladder of learning," reaching from the Preparatory School at the bottom to the University or even the student life at the top.

For history is so vast a subject that the absence of method results in waste of time, overlapping of subjects, isolated successes, frittered energies. One illustration shall suffice. A boy may have been well taught at his Preparatory, and carry a good basis of historical knowledge with him to his Public School; and in some cases he will have forgotten in a year much of what he once knew well. And Why? Because the Form in which he is placed is set to work perhaps on the same subject or period, which he has just learned at his Preparatory—or, having studied pretty thoroughly the Punic Wars perhaps or the Persian Invasion, he is suddenly set down to his great confusion in the times of Epaminondas or the Imperial days, knowing nothing of intervening events. And the result? Helplessness, discouragement, idleness. I call this "waste of time" and "frittered energy." And history is so vast a subject just because the study of it does not consist merely in reading histories (however good) of Greece or Rome or England, written or translated into English, even though they are the works of giants such as Curtius or Mommsen or Macaulay. What Freeman calls the "Incidental helps to History" are numerous. "Any branch of knowledge (he says) which deals in any way with the affairs of mankind must be accepted by the historical student as at least potentially useful for his purposes. . . . the more branches of knowledge the historian is master of, the better prepared he is for his work"—so that he actually includes amongst his "Incidental helps" geology and physical geography, the study of coins and arms and inscriptions and art, the comparative study of law and of languages. Now, obviously, as a mere matter of common sense, I do not propose to saddle the unfortunate schoolboy with many of these, much less all of them at once, but I do venture to say that Freeman's position is true and his list a good one. I do say that if we wish to teach history on scientific principles to our boys and young men, some of whom may by-and-by become real "students," it should be on these lines; and I think that, by taking things in their order and by introducing co-ordination from top to bottom, we need not despair of reducing chaos to order, and of securing a continuous reasonable system of historical study for the preparatory schoolboy, the public schoolboy, and the university man, suited to their respective ages and needs.

But—to be a little more precise—I will try and sketch (in mere shadowy outline) what seems to me a *possibility* for the future in the way of "systematization"—only a suggestion to wiser heads than my own. In the Preparatory Schools English history would be *the* subject, and taught on broad lines, with reference rather to the men and to their deeds that made our England than to any broader issues at stake. All talks about causes and principles, laws and constitutions, would be reserved

for the epoch of maturer brains. To the little boy the concrete is everything, the abstract is nothing. He loves to hear about "men" and their doings, can appreciate their greatness and even their littleness and failings, enjoys and understands battles and campaigns, delights in pictures and photographs of men and places; but he rises with difficulty and without sympathy to the abstractions of law or constitutional history. He has no great objection to the "two eyes of history," chronology and geography, because he knows them as useful helps; but he cannot away with "dry as dust" details. On such lines as these, English history would be thoroughly covered *twice* during an average boy's stay at his Preparatory School; indeed, there would be time, if *two* hours in class could be spared per week, to add the rudiments of Greek and Roman history also. Incidental helps would of course not be neglected. A wall map would be in constant evidence, a blackboard in continual use. Even quite young boys very much appreciate "purple patches" from standard works read aloud to them in illustration, though I freely confess that, in my experience, nothing — absolutely *nothing* — arrests their attention and interest so much as the "spoken word" of a man who means business and knows what he is about. It is the old, old story of the "personal equation," which (like it or not) you *have* to reckon with, and which counts for as much in the schoolroom as it does in the counting house or the club or the House of Commons.

On the foundation thus laid the Public School would build. English history would still be *a* subject, but not *the* subject. It would be the centre round which the histories of other countries would be grouped. It would be treated now with special reference to the great causes and interests at stake in any conflict, to statutes and treaties and constitutional history, and above all in relation to the history of other countries, as affecting and affected by England. And as a pinch of experience is worth a bushel of theories, I may be allowed, perhaps, to illustrate the point by my own experience years ago at Sherborne. A large division of fifty or sixty boys went with me through the whole period of European history from William the Conqueror to Elizabeth in about three years: the teaching was wholly oral, supplemented by maps and blackboards; the boys used large note books, and if I worked hard, they worked harder. The results were satisfactory, as proved by the papers sent up in examination; as applied to a fair proportion of the papers the word "satisfactory" is not strong enough. There are of course a dozen different methods of teaching, varying with the man, and no one should be hampered with hard and fast lines; but my own opinion is that some system similar to this is feasible in all Public Schools, granted that a man will think it out and take trouble. Further, the outlines of Greek and Roman history taught in the Preparatory School would now be filled in to complete the picture, illustrated as it would be to the Upper Forms by the "original texts" on which they would be at work elsewhere. Above all, boys should now be encouraged to read for

themselves widely, and be directed to the right books, in which there would be no difficulty if (as is here presumed) their interest had already been awakened. As a last remark in this connection, I would say that the Public Schools can at once take a first and easy step in the right direction, if they will recognise and endorse the work of the Preparatory Schools by adding a *History Paper* (not merely a few perfunctory haphazard "questions") to the Entrance and Scholarship Examinations on the lines of the work done in the Junior Schools.

At the Universities the coping stone would—or might—be placed on the building thus orderly raised, stone upon stone; for a young man would arrive there with a competent knowledge of English, Greek, and Roman history, and with a fair knowledge in outline of the history of Europe. But I pause, lest I be held to deal with things too high for me. There are apparatus, museums, men in abundance; only system is wanting. And those who suffer are, not so much the Candidates in the School of History as the vast ruck of Passmen, some of whom become masters in Preparatory Schools, and are for the most part helplessly unfit for this special part of their work. But I venture to submit that, in the case of the Universities, as of the Public Schools, a first step would be taken in the right direction if all colleges could be induced to recognise the work of the Public Schools in History (as in Classics) by adding a *History Paper* to their Entrance and Scholarship Examinations on the lines of work done in those schools.

But at present all these, I fear, are mere "counsels of perfection," and the Greek Kalends are long a-coming. Meanwhile the Preparatory Schools have to do their work without count of the Public Schools and to face their own difficulties as best they can. Not the least of these is Discouragement. It is one thing to feel yourself a link, however humble, in a long chain, and to know that every lesson given is helping a boy upwards to a foreseen end, labour not lost: it is quite another to work in isolation and at haphazard. Of course, the perfect man will continue to do his best even under difficulties and will not allow himself to be discouraged. He knows his game is worth the candle. But we are not all perfect men. As long as a Preparatory Schoolmaster sees that the Public Schools as a body set little store by his historical work and that they attach small value to knowledge of history in their examinations, he would be an angel if he were not discouraged.

Another difficulty, already touched upon, is insufficient time. Many teachers, who are strongly impressed with the effects of historical study on the mental intelligence of boys, feel their hands tied by lack of opportunity and plead for "more time." They want it, not so much for the sake of the extra amount of knowledge to be gained as of the benefits resulting from the process of learning, a truth which needs pressing home—they cannot get it, because it doesn't pay!

"Let our boys be taught what will be of use to them in after life." Schoolmasters know well the parental cry—and there is

truth in it, if we define our terms. What do we mean by "of use"? Is there anything more "useful" to a boy in the proper sense of the word than to be trained from the first to take an intelligent interest in things, to use his judgment, to be reasonable, to think? Well, all these good things the study of history (amongst other things) gives a boy; and that is why Preparatory schoolmasters want more time. It has been suggested that this could be gained by deferring Greek Construing and Greek Prose to the later stage of the Public School and by devoting some of the time thus saved to history; and this is entirely in line with the view now widely and increasingly held that Greek is begun too early in life and would be learnt as well or better at the Public School. At any rate, amid the multiplicity of subjects clamouring for admission to the school curriculum, it seems probable that the additional time asked for can only be gained in the way suggested.

Let us suppose this time gained, so that at least two hours a week should be available for History—how could it best be utilised? Three ways suggest themselves as possible. One hour might be devoted to a broad view of a short period of (say) fifteen or twenty years, and the second to a more detailed study of some of its chief events. Or, the first hour might be given up to a set lesson, whether oral or based on a text-book, and the second to a review of the lesson by means of *viva voce* questions or (better still) of a short paper. Or, one hour might be allotted to English history and the other to Greek or Roman alternately or in alternate terms. Personally, I have such a strong conviction that the object at which a teacher of little boys should aim is before all things to arouse their *interest* in history as a subject of study—to the exclusion, if necessary (only it is not necessary), of even accuracy or exact knowledge—that I should have no hesitation in recommending the third alternative, as most likely to forward that imperative end. Interest, once aroused, need never flag; and the Persian or Peloponnesian Wars, the Punic Wars, or the career of Cæsar, lend themselves easily to a picturesque and graphic treatment which rouses a boy's imagination and kindles his enthusiasm—and intelligent enthusiasm means interest.

Again, considering the unmethodical fashion in which our boys of all ages are taught their history, it is no wonder that complaints are rife of the ignorance and inefficiency of assistant masters in teaching the subject. How *can* they teach what they do not know, or use methods of which they have never heard? In such a case they are driven to adopt that most wooden of methods, keeping one lesson ahead of their pupils in the text-book, and to learn by "experiments on vile bodies" how to teach. *But that is not "teaching."* Happily it is not all assistants who are in such evil case, and I myself know some splendid exceptions; but I fear it is the rule and must continue to be the rule, until some more systematic methods of historical study are adopted in Secondary Schools.

Lastly, there is one point which is somewhat of a difficulty to all who are interested in teaching history to boys, viz., the defects of the text-books on which they have to rely. "The things that most *writers* consider interesting" (says one schoolmaster) "do *not* interest boys." Another desires that "a text-book should not be too long—should be clear without being childish—and should not attempt to include too much," which is asking a great deal, though he does not seem to think so. In fact, brevity is inconsistent with interest and almost destructive of clearness, while not one man in twenty knows what to leave out. Even some great historians cannot make text-books interesting reading, however correct they may be. For when a man who has the facts of the period he may be writing about at his fingers' ends essays to boil them down for digestion by young and uninstructed minds, the narrowness of the space at his command hampers him at every turn. Brevity becomes obscurity, or (what is worse) mere allusiveness, which puzzles the unlearned; or the writer hesitates to omit something that he knows to be important, yet words have to be counted. The canvas becomes crowded; you cannot see the wood for the trees. Things lose their due proportion; and then the book, which perhaps embodies the results of a learned man's thought and study, becomes to the unhappy boy-student, who cannot read between the lines, a mere primer of dry facts. He cannot illuminate the dull page by rays of light from other sources; they are not at his command. History, so presented, has and can have no charm for the young fresh mind, but rather repels it. "Interest" is the first condition of successful teaching, and to little boys it is the first step that is so important: it is the *first presentment* of history to their minds that matters—otherwise "interest" rapidly flags, withers, dies; and, when dead, who may revive it?

Hence it is that I venture to protest against putting a text-book into little boys' hands for the purpose of *preparing* a lesson. If a text-book is used, let it be as a *résumé*, a digest, a convenient summary of what has already been taught; let it be used *after*, not *before*, a lesson. Then perhaps, by the light of what a master has said on broader lines and with manifold illustrations, a boy may learn to read into his primer what has necessarily been left out by the writer, may see more than there is actually there. It may help him to store up in memory dry facts that must somehow be mastered. It will presumably be correct, and may therefore save him from mistakes. To any, however, who are discontented with text-books as they are, and yet do not know what to do, I would in all humility recommend the trial of a method of teaching history which has gradually evolved itself out of many experiments on my part, and which I have used with success for some years. I have a weekly "lecture" of one hour, to which my class comes armed with pencils and small note-books. For perhaps ten minutes I question them on the preceding lesson, keeping things lively by allowing 'snapshots,' and a correct answer taking a boy to the

top of the class—perhaps even from the bottom. Then I talk on the subject of the new lecture (map and blackboard in frequent use), not fearing to diverge at all possible tangents or to follow side clues, fearing still less to use plain language, or even slang, anything to drive a point home or to keep up interest, recalling wandering thoughts by sudden, sharp questions—often recapitulating. Meanwhile, the boys are writing down what is said in their own way. Before the next lecture these rough notes are condensed by the boys, put into shipshape, and copied out “fair” in a large note-book—looked over by me, marked, and returned to the boys. The majority, after a little practice, make a very good *précis* of what has been said; some learn to draw from the blackboard capital maps or plans. The method has this advantage, that I leave out what I please and dilate as I please; and not only is the unfruitful text-book not needed, but a boy all the time is drilled in attention, drilled in writing with his hands while he listens with his ears, drilled in putting ideas into English, the copying notes out fair into a second note-book helping to fix the facts in his memory by the necessity of condensation, and securing that he shall not murder the Queen’s English nor spell at his own sweet will. Undoubtedly the usage of the majority is against me, but experience proves to my mind that the method can be made a success, and I am more and more convinced that, as the chief point with little boys is to arouse and enchain their *interest*, a text-book, if used, should be only for purpose of reference out of school, and not used in form, much less closely followed.

Briefly to sum up, I have tried to state shortly (but I hope sufficiently) what a typical section of the Preparatory Schools are doing, and, to my mind, doing well in the way of teaching history. I have pointed out what seems to me some of the chief difficulties with which Preparatory Schools have to contend, and have endeavoured to sketch in outline a “better way,” which would dispose of those difficulties, and would make our present “go-as-you-please” method systematic, continuous, and therefore more successful. Lastly, I have described the method which, with occasional modifications, I have myself employed for many years.

A. M. CURTEIS.

THE TEACHING OF GEOGRAPHY IN PREPARATORY SCHOOLS.

I.

In dealing with the question of how far Geography should be taught in Preparatory schools, one is, of course, at first confronted by the difficulty of finding room in the already overcrowded time-table. As long as the standard of the Public Schools is what it is in classics and in mathematics, and as long as boys are anxiously prepared either to get scholarships or to take a good place on entrance, so long will the time-table show a large proportion of hours given up to Latin and Greek and a lesser number devoted to mathematics, while modern languages, history, and geography contend for the remaining spaces of time. Experience tells us that when we have reached the end of one of those terms—which sometimes seem so long—we are not a little disappointed and surprised at the small amount there is to show in every subject. To make good, then, the claims of Geography to a more prominent place in the work done by boys at Preparatory Schools, we must show to the satisfaction of the Public Schoolmaster and of the Universities its value as a factor in education, as well as impress upon those who are teaching boys under fifteen, the importance of making it a natural starting point for all future training. The first thought that needs our attention is that in school life there is a want of connection between the different subjects. Term to a boy is a time-table varied by impositions. There is no common ground on which his classical and mathematical studies touch each other. They are totally and entirely distinct, as are the masters from whom he learns them. Now it cannot be denied that if Geography were taught with the object of connecting the work in schools a great deal might be done to make the amount of knowledge which we now convey done up in separate parcels, in the future more panoramic, that is, a picture showing a view completely around the spectator. For instance, if the Mediterranean Sea be taken as a starting point and two maps side by side displayed to show, one the manner in which the land surrounding it was divided in the palmiest days of the Roman Empire, and another exhibiting the modern empires and kingdoms, there would then not be that sense of separation which seems to exist between what are called Ancient and Modern History. Let it be clearly shown

that while land and sea, river and mountain still remain as they were from the beginning, yet man and his struggles with his fellow-men have changed the surface, have moved the boundaries, and shifted the points of interest round that sea which plays so vast a part in the story of the world. Perhaps the Nile and its yearly message of food would be as good an example of any that we could give of the eternal and abiding work of the Maker of the World, contrasted with the passing away one after another of the races which have lived upon its banks. In fact Greece, Italy, Asia Minor, Palestine, and Egypt illustrate classical literature and the Holy Scriptures, and the boy who understands their position will find his Homer and his Virgil, his Xenophon and his Livy all come easier to him, and the journeys of St. Paul will present no difficulty.

When we have thus established our principle of cohesion by means of Geography we can proceed to our second point, that of expansion. It can be brought before the young mind so that it may grasp the widening of the interest of the world. The boy will learn from his history of the period of discovery of Vasco di Gama, of Cabot, and of Columbus, and then his knowledge of Geography will bring home to him the gradual illumination of the dark places of the earth. The rounding of the Cape, the landing in the West Indies, will lead him on to Africa and to the United States. Also he will see how it was that the one supplied the other with slaves, and what came of that. And intelligent study of the very names on the North American continent will give him the history, first, of the original people who have left Ohio, Mississippi, Alabama, and Massachusetts as witnesses of their occupation of the land, while Virginia will tell him of Sir Walter Raleigh, Maryland and Carolina of the Stuarts, Pennsylvania of the Quaker who founded it, Philadelphia of the brotherly love of the Quaker sect, and Louisiana of the French attempt to found colonies. Familiar English names will tell him how the settlers tried to commemorate the places from which they came. Then, on another continent, the voyages of Cook will remind him of the foundation of Australia, and the struggles of Warren Hastings and of Clive and the victories of Wellesley will, if he has his map beside him, recall the advance in India towards that empire which we govern to-day. It is not the least part of an Englishman's education that he should grasp his citizenship in that Greater Britain which lies beyond the sea. Then if through his Geography he has gained some power of cohesion in the history of ancient times and has arrived at some conclusions with regard to the expansion of empire which has come about in modern days, he may also learn from it how it has come to pass that languages have arisen. It is not impossible to teach him something about that common stock of many tongues which is called Aryan, and if he knows his map he can easily see how it is that there are so many likenesses between the tongues of Italy, of France, and Spain. Then he will understand how the Teutonic is not only found upon the northern

half of the mainland of Europe and round the Baltic, but also how it found its way to his own country with the invaders, and thus displaced the Celtic tongues, which have been driven back until their small remains are found in the distant Highlands of Scotland, in the mountain districts of Wales, in the wildest West of Ireland. And if he has some light thrown upon the way in which men speak in countries, is it not true that he will be able to understand something of the reasons which have made some countries most successful in planting their people in distant lands, when he sees the position on the map of Holland and England, and will he not understand the isolation of Switzerland, the enmity between France and Germany, the half European, half Asiatic character of Russia, the ample supply of seamen from Sweden and Norway? It would be easy to show him how Africa has had less chance than Europe of development, the one having an unbroken coastline with most of its territory at great distances from the sea, and the other with so much of the land accessible from two sides, and if the influences of position on national character were not sufficient, would not some facts about the different climates make clear to him the greater industry of those who live in temperate climes compared with the natural inability to work under conditions of extreme heat, or with a supply of food which can be obtained without much exertion? If Geography were thus made to contribute to the explanation of the facts which go to make up the History of the World a more intelligent boy would come to every other class, and it is not unlikely that thus regarded Geography would be acknowledged as useful in the very highest degree. The standard which is thus set is not too high for anyone who cares to make use of a powerful factor in education. There is no reason why boys of almost less than average intelligence should not grasp, at all events, a considerable proportion of such teaching as can be given by one who feels the subject to be of deep importance.

It is certainly difficult to understand how any one can consider such methods of treating Geography as wanting in the power of eliciting thought. No more attractive way of realising the past and present is open to us. The life of man on this earth is full of matter for thought. It is almost a boundless subject. No one need obscure the illuminating power of Geography by the introduction of painful details of population and other varyingly accurate statistics. These things are not education. They may be dismissed at once from consideration. But everyone desires that the boy should have the wider knowledge that comes from the true Study of Geography. He can learn his grammar, and write his composition, to arrive at accuracy and style. He can make himself better educated by cultivating his reason in Euclid, and his calculating powers in Arithmetic or Algebra. He must know the main outlines of Literature and History, but he is not educated if he is ignorant of the causes which have made men what they are, and of the truths which sea and land can tell him. Those who would put

"importance attaches to a judicious assortment of slides: otherwise attention is dissipated instead of being roused by its use."

A very full list of aids: "Relief Maps, Relief Globes, Tellurians, Silenoscope, Geological and Botanical Diagrams, Magic Lanterns, Object Lesson Cards, Diagrams illustrative of Physical Geography, General Knowledge Charts."

Describes the practice of the Master to be that: "He draws from memory, and questions entirely without a text-book, constructing his outline and filling in details before the class." [Text-books are allowed for revision.]

Points out the desirability of Masters being able to draw quickly and accurately on the blackboard.

ANALYSIS OF ANSWERS TO QUESTION 1.

No special apparatus is used in 58 out of 121 schools, and the use of the lantern is recorded in 15 cases out of 121. The blackboard is mentioned in 23 cases and the globes in 18, but possibly they may not have been thought to come under the head of apparatus.

One might hope that perhaps a larger proportion will use more than Text Books in the future.

ANSWERS TO QUESTION 2.

Naturally the second question has produced a variety of answers. The general tone is that it should be more largely taught, and would be so but for the public schools.

"The Public Schools' requirements on this subject are practically nil, so the subject is starved at preparatory schools for want of encouragement in Scholarship Examinations at Public Schools."

"At the school where most of my boys go, both in Entrance and in Scholarship papers Geography is practically ignored, so that I have to do less than I should like."

"The schools above us do not give much encouragement."

"If Public Schools' requirements would only recognise it more, I would gladly see more time allotted to it."

"Boys seldom learn Geography in the Public Schools."

"A fascinating subject, but it does not pay for Public Schools."

"Under existing public school requirements I do not see how we can spare the time."

"I should like to be able to give it a more important place, but to do this Public Schools must be less exacting in some other subjects."

"So little time is allotted to it in Public Schools."

"I would like to see it taught more thoroughly and especially in Public Schools."

NOTE.—In many cases want of time—probably for the above reasons—is given as a reason for not teaching it more. Another opinion running through the answers is that much, if not all, depends on the teacher.

"Intelligent teaching of it is no doubt capable of becoming of immense educational and practical value."

"The difficulty is to find teachers who are sufficiently specialistic."

"Unless a teacher is efficient and self-controlled, a form is apt to learn nothing."

"It *can* be made of the greatest use—whether it is depends on the teacher."

"The educational value is equal to that of any other subject, but it requires a specially trained teacher."

"With a good teacher it makes a good subject."

"It is a most difficult subject to teach well, requiring as it does to be supplemented by wide reading."

"Geography, as taught at present, has little value."

"If well taught I think it may be made of great educational value. Up to the present neither the schools nor the Universities have done anything towards training a man to teach the subject. If there were a supply of good teachers I should like to see the subject more taught."

"A good subject when in competent hands. Better not have it taught at all unless the teacher has a knowledge of his subject and some enthusiasm for it."

While a certain number consider it of no educational value many think it useful as a handmaid to History, and some consider the physical part as admirable.

"Physical Geography of value but above the heads of our boys."

"The scientific study of Physical Geography is certainly of great value."

"A study of Physical Geography forms an interesting and valuable educational subject."

"I regard Physical Geography as valuable and as a necessary part of a boy's early education."

"Physical Geography is of great value."

"I consider Physical Geography of much educational value."

"Stress should be laid on Physical Geography."

"I should like more attention given to first principles of Physical Geography."

The strongest opinions in favour of the study are as follows:—

“Yes, it strengthens the memory and enables a better mental picture to be formed than history generally does.”

“I consider it of great educational value, and, considering the extent and variety of the Empire, Geography is of the utmost importance.”

“I think Geography is one of the best means for training children to form generalisations from particulars, as the particulars are generally within their grasp, often within their experience, and the generalisations are easily proved.”

“I consider Geography of very great educational value. It is a necessity of education to any boy who takes interest in his country's progress or reads contemporary history. I consider it a subject much neglected in the ordinary school curriculum, and I think very unwisely, for it is a subject that is second to none in interest and to few in utility.”

“Geography is a subject in which very young boys are easily interested, and it may be the means of imparting a great deal of general information.”

“It is of great value. I think it might be taught more systematically and thoroughly.”

“I think it can be made of great value. It is capable of being made interesting to boys, and is valuable as knowledge directly and indirectly.”

“It is undoubtedly one of the most interesting subjects, and one of the best calculated to make them use their powers of observation.”

“Without being an enthusiast I hold Geography to be very important educationally, let alone practically.”

“There is no subject which elicits more thought and calls out the powers of observation more than Geography if rightly taught.”

Those who deprecate the study of the subject say—

“It is of slight value to younger boys, but with elders different.”

“As taught generally and by us—no.”

“You could not educate at all in the sense of developing thinking powers by Geography.”

“Of no educational value except as helping in History Lessons.”

“No—not for small boys. It does not to my mind make them think enough for themselves.”

“Not as compared with many other subjects.”

"Not so much as many other subjects, unless it is intended to include general information, and I don't think we have time for this."

"Of no training value, only of use in supplying information."

"Not of great value."

"Not of much value for young boys, and I desire no increase of teaching power or time spent on it."

"No. The broad facts can be learnt by an intelligent child at an early age. Any further attention to this subject does not develop the boy's reasoning power."

"I do not consider it of much value. I think it is more interesting to the teacher than to the class."

These opinions are given without comment lest it should be thought that Question Papers are circulated with the intention of discussing the answers in a hostile spirit. The introductory portion of this paper shows what might be done in the way of broadening the teaching of this subject so that it should not deserve the charge of want of value as a means of exercising the mind. It may, however, be hoped that the attention of the Public Schools may be called to the matter, and that we may see them setting entrance papers which shall test the teachers' efforts in the Preparatory Schools fairly, and enable those who are anxious to give boys a good grounding in this subject to do so. Much is often said about the formation of character being a great result of Public School training, and it is even possible sometimes to bring this forward as a substitute for other more apparent results. But it is open to us to suggest that such wider views as lead to that independence of thought which marks formation of character would come from a subject which has so great a field. As to the efficiency of Teachers it is certainly true that few have been trained in almost any subject. We are aware that it is a widely different thing for a man to assimilate of his own accord matter for Lessons in Geography to giving boys the results of his own teachers' methods in Classics and Mathematics. His fair copies and note-books exist in the latter case, in the former he is puzzled by being able to recollect nothing unless he has been fortunate.

It is not only Geography that requires a gift in the teacher, and we need not despair. Men will acquire better methods as the subject becomes more recognised, and if they are not led to believe that every hour they spend on it had better have been employed in stratagems to catalogue all Grammar exceptions or Algebraical formulæ in such a way as to defeat the most artful examiner.

QUESTION 3.

The average time given to this subject is $1\frac{1}{2}$ hours per week and it is remarkable how evenly the time is divided among the 108 schools which give particulars.

The first	21	give	$33\frac{3}{4}$	hours	per	week.
" second	23	"	$34\frac{1}{4}$	"	"	"
" third	22	"	$31\frac{1}{4}$	"	"	"
" fourth	21	"	$31\frac{1}{2}$	"	"	"
" fifth	21	"	31	"	"	"

These are taken just in the order in which the answers arrived ; as 108 schools give $161\frac{1}{4}$ hours per week, the average is just $1\frac{1}{2}$ hours. There is no general rule as to when the subject is taken—perhaps more often in the afternoon than in the morning, and the last hour in the morning rather than earlier. On the whole I consider this amount of time more than I expected to find, considering the many subjects which must find a place in our time-tables.

FINAL SUGGESTIONS.

I venture to think that a few hints may help, but I have no elaborate method to recommend. May I suggest that :—

- I.—If a given country be set for a form to study, it is necessary first of all for the master to find out as much as he possibly can about it ; no book of travel but will yield something.
- II.—A quickly drawn map on the blackboard will give a knowledge of the main physical features.
- III.—A second map, drawn on another day, should indicate the political features.
- IV.—Compare your subject-country with others, as to size and shape.
- V.—Show pictures, not only of scenery, towns, and peoples in your special country, but also of its animals and plants.
- VI.—Any fresh facts that appear in the daily papers can either be dictated or the extract put on your notice-board.

How much we should use lantern slides depends on our own skill in choosing what will teach and not confuse. The teacher can use the blackboard, the lantern, the coloured chalks with the best results, if he knows what not to teach—it is a pity not to be able to see the wood for the trees. Certainly the main ingredients in success are—

1. The power of selection of facts.
2. The power of rejection of facts.
3. The power of expression by hand as well as word.

- A. As to Astronomical details, they had better but slightly be insisted on. The position of the Earth in the Solar System is an essential. The distances through space are not.
- B. If clearly defined the terms used in making maps are necessary, *e.g.*, "Latitude," "Tropic."
- C. The forms and shapes of water and land on the Earth's Surface are essential. All physical features should be familiar.
- D. The manner in which men inhabit the Earth, or the subject country, should be clearly shown. Elaborate statistics not needed.
- E. It is best, I think, to teach by means of notes, which soon gather into a respectable amount of information, and if older boys like to consult text-books, *e.g.*, "Whitaker's Almanack," they can always be encouraged to do so.
- F. Of making maps there should be no end.

F. R. BURROWS.

THE TEACHING OF MODERN LANGUAGES
IN PREPARATORY SCHOOLS.

SYNOPSIS OF CONTENTS.

Questions raised.
Analysis of replies.
Present teaching in Preparatory Schools.
Objections to change.
Suggested reforms.
Various opinions.
Principles of complete reform.
Teachers.
Conclusion.

THE TEACHING OF MODERN LANGUAGES IN
PREPARATORY SCHOOLS.*

In order to obtain accurate information as to the present development of Modern Language teaching in Preparatory Schools, the following questions were addressed to 255 head-masters :—

- I. How many boys in your school learn German ?
- II. Do all the boys learn French ?
- III. How many French classes are there ?
- IV. How many hours per week are devoted to French ?
 - (a) Preparation ?
 - (b) Lessons ?
- V. Is French taught by a foreigner or by English teachers ?
- VI. Is French taught conversationally ?
 - (a) In class ?
 - (b) During recreation ?
- VII. Is special attention paid to pronunciation ?
- VIII. Do you make any use of Phonetics ?
- IX. Do you employ any special method of teaching French,
as—
 - (a) The Gouin method ?
 - (b) That known in Germany as the " New Method " ?
 - or (c) Do you teach French on the same lines as the classical languages ?
- X. What books do you use ?
 - (a) For boys under 12 ?
 - (1) Grammar ?
 - (2) Ex. or translation into French ?
 - (3) Translation from French ?
 - (b) For boys over 12—
 - (1) Grammar ?
 - (2) Ex. or translation into French ?
 - (3) Translation from French ?
- XI. Is the time which you are able to devote to French in your opinion sufficient to produce a good result ?
- XII. Should you wish to alter in any way your system of French teaching supposing that the entrance and scholarship examinations of Public Schools permitted ?

* In the present paper the term " modern languages " includes French and German only.

Replies were received from 124. The number would no doubt have been greater had it not unfortunately been necessary to send out the questions just at the busiest time of the school term; as, however, the list of those who responded includes a good proportion of leading Preparatory School masters, it is not unreasonable to regard the information given and the opinions expressed as supplying on the whole correct data for the present discussion.

The material placed at our disposal naturally varies very much in value.

It is not surprising to find that a certain minority of school-masters take but little interest in Modern Language teaching, and write without having considered the movement of reform which has for some years been active on the Continent and has lately found its way into England. One gentleman gives his opinion in the following outspoken terms:—"The teaching of French is wasted time. If a boy really needs French, six months on the Continent would do more for him than six years in an English school." This is, however, an extreme case; the majority show themselves to be fully alive to the importance of the subject and write thoughtfully and suggestively.

We here give a short analysis of the replies to each of the above questions taking them in order.

I. Only 73 schools have pupils who are learning German, and with very few exceptions, these pupils form but an insignificant fraction of the total number of boys in the school. It may be taken for granted that in a Preparatory School German is rarely learnt, except as a substitute for Greek.

II. All the 124 schools teach French; and except in the case of a small number, in which the youngest boys do not learn it, this subject has a place in the work of every class.

III. The total number of boys in these schools is 4,997 divided for French into 522 classes, thus giving an average of 9.5 boys in a class.

IV. The average number of hours per week devoted to French in each class is four, these 4 hours being in many cases distributed among six or even more lessons. In making this calculation we have not distinguished between *preparation* and *lessons*, recognising that preparation in a Preparatory School assumes much more the nature of a lesson than in schools for older boys. Thirty-two schools devote more than 4 hours to French in each class (14 of these giving from 6 to 7½ hours), 15 less than 3 hours (one falling to the somewhat low level of 1½ hours).

V. Five schools employ foreign teachers exclusively, 26 both foreign and English, and 93 entrust the whole of their French teaching to Englishmen.

VI. Nearly all of these schools profess to teach French conversationally in one or more of the classes.

VII. All recognise the importance of paying special attention to pronunciation.

VIII. Phonetics are not used, and in many cases appear to be unknown; the notes which are written in reply to this question varying in emphasis.

IX. Eleven schools employ what is known in Germany as the "new method," 32 have adapted the classical method to meet some of the demands for reform, and 81 teach French (some "as much as possible") on the same lines as the dead languages.

X. Some 150 different books are used in these schools for the various branches of French teaching, forty-five distinct grammars alone being named.

XI. and XII. Fifty-eight headmasters are content with the amount of time which they are able to devote to French, and state that they have no desire to alter their system in any way, supposing that the entrance and scholarship examinations of Public Schools permitted them to do so; sixty-six, on the other hand, are not content, and suggest various changes which they wish to carry out, but state that they are prevented from doing so by the examinations referred to.

By the light of these figures and the other information at our disposal, we will now give a brief summary of what appears to be the usual course in good Preparatory Schools with respect to French teaching. German we omit from consideration, as it is only occasionally taught, and does not form a regular part of the school curriculum.

We find that French is taught mainly on the same lines as the classical languages, and that the teachers are mostly Englishmen with Public School and University training.

Occasionally the time-table is so arranged that one master specially qualified shall undertake the French teaching of the whole school, but more commonly it is shared by several members of the staff, and sometimes a French lady is added "to give the dictation and to converse in French." The classes are small, averaging nine or ten pupils, an ideal number assuming the learners to be on a fairly even level of proficiency. The time devoted to the subject is in the case of boys preparing for the classical side, especially where scholarships are aimed at, as a rule barely sufficient. Lack of time is, however, only one of several causes to which failure, where it exists, may be attributed, and very possibly not the chief one. If we inquire as to results, the answer may perhaps be found in the words of a headmaster who devotes slightly more than the average time to French, and who, in reply to question XI. says:—

* "Yes, I consider that a sound foundation is laid in translation and composition, and if a boy were sent abroad for three months he would quickly acquire the power of conversing freely."

* In the numerous quotations given in this paper we have endeavoured to change the actual words used as little as possible. It must, however, not be forgotten that the replies to our questions were in most cases hastily drafted, and not put into shape for publication.

Or we may quote another headmaster who, giving exactly the average time to the subject, in answer to the same question says:—

"Yes, a boy will not be able to speak French when he leaves us at 13 or 14, or to write French prose, but he should know his grammar well, be able to translate French with some facility and render straightforward sentences into French."

These two answers are typical, and seem to us to convey a correct idea of the attainments of the average boy on leaving a good Preparatory School. No doubt some boys attain to a much higher standard, and, besides knowing their grammar and translating well, are able to read and write and even to speak French fluently; but it will frequently be found in these exceptional cases that school teaching has been largely supplemented by special advantages at home. Probably only a few schools can by their unaided resources turn out such accomplished French scholars. One of our correspondents says:—

"The boys learn and act French operettas—rewritten by me as a rule—and plays."

But these boys have six lessons of three-quarters of an hour a week, besides half an hour of preparation.

If, however, there are some boys who stand out as far above the average, there are only too many who are far below it; who, when they go to a Public School, have not mastered the elements of French accidence, to say nothing of syntax, and who have practically no vocabulary and are helpless before the simplest dictation.

Many Preparatory School masters, as we have seen, are far from satisfied with these results. Fifty-eight, it is true, express themselves as wishing for no change; and of these the majority would no doubt take their stand on the old arguments in favour of making the classical languages the basis of all education, at any rate of all linguistic training.

"By their classical training," they would probably say, "boys are taught to think, they are taught the general structure of languages and they are taught style. Neither the Mother-tongue nor French nor German are much taught at school, but boys are equipped through classics with the best means of learning these languages later as the need arises and as opportunity offers. To sacrifice these advantages for the sake of a more practical study of Modern Languages at school would be merely to abandon true education for utilitarian ends."

A certain number, however, of those who wish for no change take a different standpoint; they are content, not because things are as they should be, but because they are sufficiently good to satisfy the requirements of the Public Schools. A few quotations, again from the answers to question XI, will illustrate this:—

"We attain a result good enough for English examinations, but not sufficient for thorough facility abroad."

"We get good results, considering the low standard demanded of us."

"Yes, sufficient for Public School purposes. Navy boys, of course, do more."

"Sufficient to bring boys to the very moderate standard required by the Public Schools."

Some masters express themselves in much stronger terms; they wish for change, but are deterred by the Public Schools:—

"I should like to do more, but it would only be forgotten with the present arrangements at most Public Schools."

"If we could feel sure that credit would be given to even a little French taught soundly, grammatical or conversational, when our boys reach the Public School, we should feel more enthusiastic. As it is, things are unsatisfactory."

One master who devotes only one and one-third hours a week to French says:—

"I should say the time is not sufficient as a general rule; some boys seem to do very fairly, but as a rule they don't treat the language seriously. Unless French is done thoroughly in Public Schools, I doubt if it is worth giving much time to it in Preparatory Schools."

We quote one more passage as illustrating the wide-spread feeling among Preparatory Schoolmasters that reform can only be initiated by the Public Schools:—

"I should wish for change, but we are iron-bound by the Public School entrance examinations. Preparatory Schools are what the demands of the Public School system make them. We are sadly overburdened by multiplicity of subjects, and for the average and under-average boy's sake there is much that needs remedying."

Apart from the masters who consider that reform is either unnecessary owing to the low standard demanded, or impossible owing to the scant encouragement given by the Public Schools, there is yet another class who hold that the acquisition of a foreign language at school is in itself an impossibility at least without an expenditure of time, which is obviously out of the question.

Two quotations will illustrate this. The first is from a master who devotes four hours a week, or the average time, to French. He says:—

"The difficulty of learning French is partly owing to the impossibility of *hearing* French idiomatically spoken with sufficient frequency. Accent and idiom cannot be learnt at school in *ordinary* cases (clever boys and girls who have had special advantages are not considered) without overweighting the curriculum with French. A *very* few months' hard work abroad produces a huge result on a boy who has learnt his grammar fairly and can translate moderately well."

The second quotation is from a master who devotes three and a half hours per week to French. He puts the case rather differently, but still more emphatically, thus :—

“ I should like either

“ (1) To omit French altogether from my time-table, or

“ (2) To be able to give ten or twelve hours per week to it.

“ As things are at present the percentage is very small of boys with a good Preparatory and Public School education who can read a French book or write a French letter.”

If we now pass from those who regard reform as either needless, or impracticable, or impossible, to those who advocate some change, we find that suggestions are numerous.*

Apart from one writer who wishes to be able to teach “ turning into French more, and a more scientific method of French grammar (if possible) than that adopted by French grammar-writers,” almost all advocate in one form or another a more practical study of the language than that which at present prevails in English schools. More time, it is urged, should be devoted to conversation and also to translation, more to dictation, more to literature, and less to grammar, especially to irregularities and to what one gentleman has called “ minutiae exercises.” Of course all the writers do not exactly agree with one another, nor do all of them emphasise the same point, but as the tendency of all of them is clearly the same, we have classed them together.

The issue is practically between the classical method now generally in vogue, which results in a boy of thirteen knowing his French, after devoting three or four hours a week to its study, much as he knows his Latin, and some reformed method designed to enable him to speak, read and write with some fluency, and to have read some French writings somewhat as he reads those in his native tongue.

Following the plan which we have above adopted we will quote in their own words some of the opinions of the masters who have kindly answered our questions.

A master, whose school is famous for winning scholarships, says :—

“ But for examinations we should at this age devote more time to conversation.”

Another says :—

“ I should aim at teaching it like English, conversationally first, grammatically afterwards.”

Again :—

“ I should devote less time to grammar and more to literature and conversation.”

“ I should much prefer less book-work, and more conversational French with correct pronunciation as a test.”

Another supports his opinion by reasons thus :—

“ I should greatly like to see French considered of high importance in entrance and scholarship examinations, but chiefly

on the lines of a larger vocabulary and conversation facility in matters of everyday life, my reason being that a child can be taught to acquire and to spell and write down a large vocabulary and series of phrases; these he will never forget. His youthful powers, however, of accuracy and general intelligence do not enable him to do French prose or really hard constructive translation."

Two masters are strongly in favour of more translation :—

"I should certainly like to devote more time to French conversation and translation."

"I should do more conversation, translate more English stories into French *viva voce*, and do more French translation."

With regard to dictation, two opinions particularly worthy of attention are given in very clear terms :—

"I should like to see more attention paid to French *dictée*, as in the Navy examination. I consider it a great test of a boy's knowledge."

Again :—

"I should like to see a piece of dictation given in all scholarship examinations, as, in my opinion, it always brings out the best boy."

On the subject of wearying beginners with minute details of grammar and irregularities which, till a later stage is reached, are of no value at all—"gerund-grinding," as it is sometimes called—masters are most outspoken, and it will not be superfluous to give several quotations :—

"The grammatical questions set in school examinations are only calculated to lead to a precocious knowledge of irregularities and difficulties on the part of boys, and not to a practical knowledge of the language, either as a means of communication or as literature."

A headmaster who does not himself teach French says :—

"Giving a layman's opinion, I consider that French ought not to be taught on the same lines as Latin and Greek. It strikes me as preposterous that a boy should, in a modern language, be bothered in an early stage with such minutiae as a small list of words (mostly unimportant) which form their plural in a particular way. Such a system, together with the scanty time bestowed on French, is mainly responsible for the fact that a huge percentage of boys, after some years' pretended learning of French, are totally incapable of expressing themselves on paper or orally in a way that would not instantly betray a very English origin. As to pronunciation, my experience has shown me that it remains hideously insular."

Another headmaster says :—

"I wish for reform, but as long as examiners mainly interest themselves with peculiarities and irregularities and examine on classical lines, it seems hopeless to adopt any more modern method."

Again:—

"The present system of Public School examination demands a knowledge of grammar often of rare practical application, which absorbs an amount of time quite out of proportion to its value."

"If the Public School examinations laid less stress on grammatical irregularities, and on translation from English to French of short sentences, much valuable time would be saved. More attention should be given to dictation, *vivâ voce* examinations, and to original composition."

One of the replies is so full of detail that we feel justified in quoting it at some length; the author, besides being an exceptionally good French scholar, himself takes the leading part in his own school in giving the instruction, and so speaks with practical knowledge. We must mention that he finds time in his curriculum for a daily lesson of three-quarters of an hour. After saying that he would prefer to do much less "minutiae exercises," and much more continuous and rapid translation, he continues:—

"It is useless and absurd to teach French like Latin. It is wanted for a practical purpose, and not as an educational instrument.* From the very first the aim must be to give the greatest possible familiarity with the language, allowing for the ridiculous fact that nearly the whole of the examinations a boy will have to pass will be entirely written, and turn largely on minute grammar."

"In Latin extreme accuracy and grammatical knowledge are in themselves most desirable things, for the absence of which no amount of readiness in translation could compensate. In French they are merely means to an end—practical familiarity with the language, which is the point to aim at from the first. If the boys can gain that in the early stages they will be ready to pass any examination with credit in the later ones."

"All the Lower School work must start from and be based on conversational fluency."

"In the Middle School the details of grammar must be acquired. In the Upper School, French composition and extreme readiness in translation."

"A great deal of the composition should be blackboard work. There should be no getting up of books for examinations, and the texts should be without notes."

"In preparation in the top sets the Master should act as dictionary, telling, or not, the word as he thinks fit."

"There must be at least two conversation lessons—according to the Gouin or other method—in every set each week."

"In the top set a story should occasionally be read in French, and the boys made to write its substance or reproduce it orally in French or English."

* It may be remarked that the German reform method claims, not only to answer a practical purpose, but also to be an educational instrument of great value.

When we come to the question what method or measure of reform should be adopted, supposing that some departure from the old system should be decided on, we find that few masters see their way clearly. Some have tried or wish to try the Gouin method. The master last quoted uses it to some extent, but says :—

“It is practically very difficult to work owing to removes, as the class must be taught all together and no one can teach it but myself.”

Another master says :—

“I do not approve of Gouin or *vivâ voce* method alone. A mere vocabulary easily slips away : witness the results of an early knowledge of words in children brought up by Indian, French, or Russian nurses, but the knowledge acquired by the natural *vivâ voce* method is most useful when supplemented by other means.”

A master who adopts what is known as “Improved Gouin Method” says :—

“Supplementary lessons in grammar and exercises are found advisable.”

He adds :—

“It would be interesting to see how far the Gouin method is successful when applied throughout the entire school course of a pupil. In such a school as this there is not sufficient time to judge of the result. Unless a pupil goes on to a school where it is in vogue, he finds himself compelled to learn French again as a dead language, and though he may have a good working acquaintance with the language, being both able to understand it and to make himself understood in it, he comes to grief over the grammar, as required, and the set exercises. The want of uniformity of treatment is a hindrance to the proper acquisition of the language. The ‘dead language’ method of learning French must be condemned as a failure; in spite of years spent over its study at school, as soon as it is required practically, *e.g.*, for the Foreign Office or kindred examinations, it has to be learnt by at least six months’ residence abroad.”

The German Reform method is, as we have seen, known only to a few English Preparatory Schoolmasters, and apparently only one or two have as yet very seriously taken it into consideration, though, if reform be once finally decided on, there can be hardly any doubt that this will be the method adopted. It will be interesting to hear the opinions of one or two schoolmasters who advocate it. One says :—

“I should be inclined to abolish the teaching of French grammar until boys could use the language to a certain extent conversationally. I desire to adopt the German reform plan of French as the only foreign language for the first two years—say nine to eleven. Then Latin—say eight hours a week, and two hours of French to keep up what was learnt before.”

Proposals of reform are still more boldly formulated by another schoolmaster who is well acquainted with what is going on in Germany, and who writes as follows :—

"I should like the French teaching in Preparatory Schools to be so completely and thoroughly carried out, that by the time a boy reached his Public School he should be at home in the language. He would then need only the scanty two hours a week the subject receives at a Public School to keep up what he had learnt, and could specialise in classics or science to his bent. But this, of course, would mean a great deal of time (three-quarters of an hour daily) devoted to French at the Preparatory School and "intensive teaching," and (as a corollary) the postponement of Latin till the age of (say) eleven or twelve, and of Greek till the Public School is reached."

Here we have in a nutshell the programme of those who are in favour of wholesale reform.

It will perhaps serve a useful purpose if we somewhat amplify what has been so concisely put, supplying a few details so as to make the change fore-shadowed more easily understood. The phrase "intensive teaching" supplies the key to the whole. Instead of dividing the hours available for language teaching between English, French, Latin, and Greek, the pupil would concentrate his attention mainly on one or, at the most, two of the languages at a time. Till the age of about eight or nine the mother-tongue alone would be taught. French in the nursery, which is so often attempted at present, would be discontinued. The little pupil would first of all be carefully trained in the sounds of his native tongue; he would, to borrow words recently used by Dr. Heath, of London University, "be encouraged to appreciate that in speaking he was making use of a beautiful musical instrument." He would do much reading suitable to his age, at first probably from phonetic script, and would learn by heart many carefully selected pieces in verse and prose, and would be taught to say these with perfect articulation and to bring out the sense by change of voice and stress. Reading from orthographic texts would be followed by dictation, and finally would come parsing and analysis of easy sentences. On going to school at nine he would begin French, in which he would have a daily lesson of three-quarters of an hour. The sounds would come to him very much more easily than they do under the present system, as he would have had the advantage of a preliminary training in the sounds of his own language and probably in articulation generally; the grammar, too, would give him far less trouble, as in his native tongue he would have learnt the main terms and principles of grammar, and he would not be perpetually encountering two difficulties at the same time. Latin would be commenced at twelve, by which time the hours devoted to English would be curtailed. Greek would not be begun till the Public School age, when the two hours at present usually given to French would suffice to keep up the sound knowledge already acquired.

In this connection it may be noticed that until quite recently the question of the order in which languages—modern and

classical—should be taught has been more fully discussed in Germany than in England; in fact, to the English schoolmaster the suggestion that Latin should not precede French will still appear almost revolutionary.

It has always been felt in this country that it is only natural that the pupil should approach French—an offshoot of the Latin tongue—through Latin. There is no need here to repeat the many sound arguments which are advanced in favour of such a course of procedure. It is certain that the preliminary knowledge of the elements of Latin accidence and syntax will be of great service to anyone in learning French grammar.

It has therefore come as a shock to many of us, who are not familiar with all the educational views of Locke and some of his predecessors, to hear of eminent classical scholars in Germany who are strongly in favour of devoting three years in Secondary Schools to the study of French before commencing Latin, and of their allowing two more years to elapse before the pupil begins to learn Greek. It is only natural that such a course should recommend itself to modern language teachers, and their opinion on the question will hardly be thought altogether unbiassed. But if it is approved also by teachers of classical languages, it at least merits serious attention.

We may take one instance to show that such is the case. Dr. Reinhardt, the head master of the well-known Goethe Gymnasium, at Frankfort-on-the-Main, who, as may be inferred from the position he occupies, is a distinguished classical scholar, has strenuously supported the view that a boy should begin the study of foreign languages with something less remote from his mother-tongue than Latin. He has found that boys who, entering his school at the age of nine, have received a daily lesson in French during the first three years, make such progress when they begin Latin in their fourth year, that in the following year when they are from 13 to 14 years of age, they accomplish the whole of Cæsar's Gallic War, mastering the language with such ease that they are able to appreciate the book as a historical work, and not merely as a Latin reader. This result, he informs us, is not obtained in German schools by boys who have followed the traditional course.*

It is scarcely necessary to add that during the first three years these boys have acquired a command of French, both grammatical and conversational, that would astonish those who are acquainted only with our English schools.

* The following table, taken from the curriculum of the Goethe Gymnasium, shows the number of lessons per week assigned to the several languages in each year of the school course:—

	1st Year.	2nd Year.	3rd Year.	4th Year.	5th Year.	6th Year.	7th Year.	8th Year.	9th Year.
Mother-tongue.	5	4	4	3	3	3	3	3	3
Latin	—	—	—	10	10	8	8	8	8
Greek	—	—	—	—	—	8	8	8	8
French	6	6	6	2	2	2	2	2	2

This question of the postponement of Latin is evidently a very wide one. Here we can do no more than recommend it for careful consideration.*

The efficacy of the "intensive" plan on which the Frankfort system is based has, however, now been proved by experience, and it may be regarded as an axiom that a better result is produced by daily lessons continued for, say, a third of school life, than by two lessons a week continued during the whole of school life, that is to say, the same number of lessons spread over a longer period.

In England if it were decided that the main portion of a boy's school French should be learnt between the ages of 9 and 12, there would be the great advantage of the smaller classes found in Preparatory Schools. We know, it is true, that a trained German schoolmaster can teach a modern language successfully to classes of 40 boys without allowing a moment to be wasted, but none will dispute that the task of the teacher is greatly lightened if the class numbers only 9 or 10.

The question of any radical change rests, of course, solely with the Public Schools; if they wish for it and adjust their examinations accordingly, the Preparatory Schools will unquestionably find the means to meet their requirements. Such a change as that above-described could undoubtedly be carried out if schoolmasters and parents were agreed as to its advisability; and experience in German schools shows that the effect is no less advantageous to the classical studies than to the Modern Languages.

One great difficulty seems to be widely felt, and that is the lack of competent teachers; and in their answers to our questions schoolmasters have given abundant expression to their doubts on this head. One master who has tried the new method says:—

"I got admirable results from the new method in a Grammar School, but it seems to me that it requires a master who has a thorough command of French as a spoken language and who believes enthusiastically in the method. Such masters are hard to procure at all; almost impossible for a small school."

"There is probably little doubt that the latter (*viz.*, teaching French colloquially) would be the best plan, but it is very doubtful whether a sufficient number of competent teachers could be found, at all events at first, to meet the demand."

Another master says:—

"I have found, after 21 years' experience, that it is a very difficult thing to get a good French teacher. I have tried Frenchmen, Swiss and Germans, but without success."

* Those who care to pursue the matter further will find it fully treated in Papers 2 and 7 in Volume 3, of *Special Reports on Educational Subjects*, issued by the Education Department (Eyre and Spottiswoode), entitled respectively *Problems in Prussian Secondary Education for Boys, with special reference to similar questions in England*, by Mr. M. E. Sadler, and *The Teaching of Modern Languages in Frankfurt a/M and District, with some account of the Frankfurter Lehrpläne of 1892*, by Mr. Fabian Ware.

The experience of Preparatory schoolmasters seems to show quite conclusively that it would be an error to rely on foreign teachers :—

“The foreigner who can teach French to English boys with success is a very rare article ; much the best results would be obtained by an English teacher who had thoroughly studied the language by residence abroad.”

“With regard to foreigners as teachers my experience is that they very rarely are able to maintain discipline or inspire respect, and that they waste much time by needless talk, their translation from French into English is faulty, and young boys find a difficulty in understanding their explanations.”

“When I have tried foreign masters, their ignorance of our code of trust and honour has been a greater evil than their pronouncement was good.”

Such criticism may appear harsh and even at first sight unjust, but, judging from the evidence in our hands, it appears to represent a wide-spread opinion ; and we must bear in mind that it is not implied that there are no exceptions to the rule. It merely shows that, as is the case with Englishmen, the best and ablest foreign schoolmasters prefer to remain in their own country, and are not as a rule available, at any rate, for English Preparatory Schools.

This is to some extent, though in a very much less degree, true of women-teachers also. It is no doubt difficult, but it is not impossible, to find a good foreign governess suitable for a boys' school ; and there is no doubt that such a governess is a very useful auxiliary to English teachers of French.

The scarcity of English schoolmasters who have anything approaching to a real command of French is no doubt a serious obstacle to speedy reform, but it is possible to exaggerate the difficulty, and it would clearly be a fatal mistake to despair of reform in consequence. Supply has a wonderful way of adapting itself to demand, and if it were once known that to a man otherwise qualified to be a schoolmaster, time and money spent in the acquisition of a foreign language would prove a profitable investment, the experiment would soon be tried. When in Germany, which has the reputation of being a poorer country than England, men find the means of devoting two years after leaving the University to their training as schoolmasters, are we to believe that the same is impossible in England ?

No doubt when some system of training teachers for Secondary Schools is elaborated, it will include special facilities for the equipment of those who propose to teach Modern Languages. We may even hope that, as in Germany, travelling scholarships will be multiplied whether by the Board of Education or by other bodies interested in the improvement of teachers. Meanwhile we shall have, as in the past, to trust to individual effort and resource. Men who wish to learn a Modern Language can certainly find opportunity during their time at the University in the long vacations, and when they have begun their

career as schoolmasters there are occasionally grace-terms or intervals between two masterships or even summer holidays available.

The question is often asked how long a time of residence in a foreign country is necessary for the complete mastery of the language. To give a precise answer is hardly possible, as it so greatly depends on the individual; and also the word "complete" is not always understood in the same sense. It may, however, be generally stated that if a man desires to qualify himself to take his place in the highest class of teachers, he must not be satisfied with devoting less than two years to the subject; and it must not be mere purposeless residence abroad, but a well-planned course of study adapted to the object in view. It is no doubt out of the question, for the present at any rate, that all teachers should be so qualified, but a school could not claim to be efficient, so far as French teaching is concerned, without one master conforming to that standard.

Such a master could be efficiently assisted by men who had received six or even three months of systematic training abroad. An elementary knowledge of phonetics should be demanded of all teachers, and the condition is not a severe one, as a couple of months suffices for its fulfilment.

The reforms outlined above, involving as they do, radical changes in the curriculum of Public as well as of Preparatory Schools, can of course be mentioned only as indicating the pious wishes of a few, and not as practical suggestions for the near future.

The question for the moment is rather whether without such changes the teaching of French in Preparatory Schools can be improved, and notably whether the German reform method is applicable.

We think that, if less than three hours a week is available, the answer must probably be in the negative, otherwise we do not hesitate to recommend it; on all, however, who are contemplating reform in the direction of colloquial teaching, we would impress the warning conveyed by several masters, one of whom says:—

"The teaching might with advantage be more conversational; but on the other hand thorough knowledge of the grammar is more useful than scrappy conversation."

While another expresses the same idea as follows:—

"While I think that the ear ought to be trained more than was formerly usual, I have found the knowledge of boys who have been taught chiefly by conversation unsatisfactory."

With these opinions we are entirely in agreement, and it is for that reason that we advise any reformers to follow the example of the Germans in insisting at first that boys taught by the new method should be prepared to submit to examination on the old lines. This is a perfectly fair condition, and pupils well taught by the new method would only find themselves at a great disadvantage if the grammar set consisted mainly of irregu-

larities and unusual constructions, and if the passages for translation were of literary interest far removed from matters of daily life.

If the Public Schools wish to encourage a more practical teaching of French, and without their encouragement it will certainly not be generally carried out, they have only to make some comparatively small changes in entrance and scholarship examinations.

1. Due credit must be given to French well taught, and it must be understood that boys whose French has been neglected are unacceptable.
2. Dictation must be set and have due weight in all examinations.
3. There must be a few minutes *viva voce* devoted to each pupil, and correct speaking and good accent must be duly rewarded.
4. While grammar must be even more rigorously exacted, the style of grammar papers must be changed; and certainly exceptions and irregularities must be excluded.

The present writers have recently taken part, the one as teacher the other as examiner, in a trial of the German reform method in a Preparatory School of sixty boys; and they propose to close this paper with a short statement of their experience during the past year.

It must be remarked that the circumstances were by no means exceptionally favourable to success, the time devoted to French being throughout the school only three hours a week, divided in the lower school into six half-hour lessons, and in the upper school into four lessons of three-quarters of an hour each. There are nine classes in the school, three being taught by a foreign governess, the other six being divided among four Englishmen who are members of the ordinary teaching staff. None of the teachers have had unusual opportunities for the study of phonetics and the other details of the method, but have had to trust to the school holidays to make good their knowledge abroad. Had the teachers all enjoyed anything like a thorough training the result would have certainly been thirty per cent. better. With the best of will and the hardest work the teacher who is more or less feeling his way must waste some of the pupils' time.

In order to preserve continuity of teaching, a book for the whole school (Rossmann and Schmidt's "*Lehrbuch der französischen Sprache*") was chosen. This was divided into eight portions, each containing matter for about a term's work, so that a boy during his school course might have time, with a term or two to spare, to master the whole book. Till the sounds were mastered a portion of each lesson was devoted to practice with the sound-table, also from a very early stage songs were sung taken chiefly from Palmgren's "*Sångbok*."

One thing is certain, and that is that the boys have enjoyed their lessons and have taken them seriously. Practice at the

sound-table, which might have been thought tedious and liable to provoke inattention and playfulness, has undoubtedly interested them, and they have apparently themselves felt that they were acquiring a new power.

The teachers, too, have shown interest and even enthusiasm; and have been ready to take extra trouble to fit themselves for a somewhat novel task.

It is at present too early to speak with confidence of results, as no boy has at present passed through more than a third of the course. It seems, however, to be pretty clearly demonstrated that it is not impossible to teach good French pronunciation at school. We do not for a moment mean to assert that the pupils have learnt in a year to utter even simple sentences like French boys, but if their pronunciation is far from being perfectly French it is no less remote from being what one of our correspondents has called "hideously insular."

Some of the recitations have been very promising, and would lead anyone to believe that English boys can be taught under favourable circumstances in English schools to speak French in such a way as to be intelligible to Frenchmen and not to offend their ears. The *vivá voce* examinations have been particularly satisfactory, and the boys have certainly gained a power of speech beyond what is usual with the average English schoolboy. This is partly due to the fact that the lessons have been conducted in French and partly to the opportunities that many of the boys have had of conversing with the foreign governess at meals and on other occasions. Such conversation, when supported by systematic teaching of conversation in school, will be found to produce very satisfactory results.

It has been asserted in some quarters that reading from phonetic script must necessarily greatly confuse the pupils and cause them difficulty when they come to deal with ordinary spelling. This fear has certainly not been justified by our experience, indeed we believe rather the opposite to be the case. In introducing the new method it was necessary at first to give extra time to *vivá voce* at the cost of written work, and the latter has no doubt to some extent suffered, but the first step passed, the written work will of course receive due attention.

The examinations are five-fold:

- A. *Vivá voce*.
- B. Exercises.
- C. Dictation.
- D. Grammar.
- E. Translation.

Each one of these is limited according to the vocabulary, inflections, and constructions occurring in the portion of the book offered for examination. In this way we think the danger of "scrappy conversation" will be avoided.

It any are disposed to try the method, but feel deterred by feeling that the task is beyond the strength of their teachers, they may still accomplish something if they only take the trouble to master the proper use of the sound-table, and to study the extremely ingenious methods of question and answer (enabling a teacher of moderate skill to conduct the lesson in French) to be found in such books as Rossman and Schmidt.

E. P. ARNOLD.

FABIAN WARE.

THE TEACHING OF MATHEMATICS IN PREPARATORY SCHOOLS.*

The study of mathematics in preparatory schools, though obviously not extensive, is nevertheless of the utmost importance. Limit in the number of subjects, limit also in the range of these subjects, there must necessarily be; a limit easily ascertained when the proportion of time that may be fairly devoted to mathematics and when the thinking capabilities of an average boy of 12 to 14 years are fully considered. Assuming that the days of specialisation are gone for ever, assuming also that "Preparatory" is strictly interpreted to mean "under 14," the range of study is "cribbed, cabined, and confined" within very narrow bounds.

Our considerations will naturally fall under two heads:

- (a). Preparation for public school entrance.
- (b). Preparation for public school scholarships.

And yet it must not be concluded that these heads represent two distinct branches of education; for all practical purposes of teaching they go hand in hand. No preparatory school master, who aims at sound work, makes any distinction between possible candidates for scholarship and the ordinary rank and file as represented by the average boy. Though the former will always outdistance the latter, yet the process of education must always remain the same, the only tangible difference being that the one is capable of a more extended course than the other, and this difference is fully provided for in the more advanced work of the higher classes to which the average boy rarely or ever attains.

The curriculum of a preparatory school is nothing if not sufficiently elastic to admit of a different classification of boys according to individual attainments and capabilities in each individual subject. Thus the same boy may be in one set for classics, in another for French, in yet another for mathematics; this is a fact that must be fully grasped in any study of English secondary schools. Under any other form of classification a boy will be almost certainly taking one of two courses; either he will be doing work which is insufficient for his requirements, which means losing time, or he will be going too far ahead, in which case he will inevitably become inaccurate and unsound. It is quite clear that an independent classification for each individual subject is of the greatest advantage both to masters and boys: to the former in providing them with a class as level as possible in knowledge and powers, to the latter in affording means of steady uniform progress in every subject that is required of them.

In the lower forms boys, whether their goal be entrance or scholarship, will naturally work together, the more clever boys being slightly younger than the rest of the class. And this

* We much regret that Mr. Allum died as this paper was passing through the press, and that it has not therefore had the advantage of receiving his final corrections.—ED.

system will continue all through the school, so that by some law of gravitation the average boy will not rise either so quickly or so high as his more gifted schoolfellow; it is therefore this fact alone rather than the wishes of the parent or the aim of the boy that eventually will decide whether a boy will have a reasonable chance of a scholarship. In a well-organized preparatory school the boys of the highest form reach the standard of public school scholarships by the time they attain the limits of age (12-14), and it is quite certain that, if any alteration is made in the length of the working day, it is in the direction of curtailment rather than in that of extension. A fresh brain is capable of more good work than one that is fatigued and dulled by a long period of hard exertion. The brain must have rest in order to grow, while a long period of severe strain would probably retard the growing process to such a degree that the brain power of what might under other conditions have been a forward boy of 14 is little, if any, more than it was two years before.

Scholarship classes, as apart from highest forms, are perfectly unnecessary and harmful—the wheat and the tares must grow together all through the school; the weaker boys will be left behind only by their inability to acquire knowledge as quickly as their other contemporaries.

By no means also let there be any specialisation of subjects to the neglect of others. True education is an *impartial* and, as far as possible, an *equal* development of *all* faculties in *due* proportion. It is quite true that some young boys show special taste for classics, others an aptitude for mathematics, yet better educational results are obtained—by which I mean more thinking power—by a judicious latitude of curriculum, than by devoting a preponderance of time and effort to the exclusive development of any individual study.

In the case of young boys mathematical genius is by nature limited, and though it is far more conspicuous in the case of some than of others, yet there will be no perceptible retardation of the mathematical power latent in the individual, if work which is more advanced than the juvenile mind should be permitted to attempt be deferred to years of greater discretion. Of course, this by no means precludes the extension of the usual limits in the case of a boy with a more than average taste for mathematics; provided only that the time devoted to the subject be not extended, good results only can accrue from more advanced work in the case of one able to receive it. Special ability for classics or for mathematics can be met by special credit in the form of marks in the weekly, monthly, or terminal totals.

At the present time the public schools that offer scholarships for special subjects, *e.g.*, classics or mathematics, may be counted on the fingers of one hand, so that there is a large and important consensus of opinion on the part of public school headmasters, which should go far to strengthen the hands of preparatory school headmasters in offering the most stringent opposition to specialisation. Does the principle of specialisation produce a

better selection of scholars? I think not; a glance at the honours obtained by the public schools at the universities does not encourage this opinion—rather the reverse. The selection of a scholarship roll by aggregate of marks obtained in all subjects will invariably contain the most able boys, and therefore those most likely to succeed in a future career of honours.

Granted then (i.) that special scholarship classes are unnecessary; (ii.) that exclusive training in one subject is harmful; (iii.) that long hours of study defeat their object; the question arises: What proportion of time can fairly, and with advantage, be devoted to mathematics in the preparatory school curriculum? It is generally agreed that a daily lesson of 50 minutes or of one hour, according to the subdivision of hours in the school, is essential. Four of these lessons are to be devoted to analytical work, *e.g.* arithmetic and algebra; the remaining two then fall to geometry, *e.g.*, Euclid. In the case of the younger boys not yet able to attack Euclid, a daily lesson of arithmetic, especially including mental calculation, will soon bring about the time for attacking algebra and Euclid.

ARITHMETIC.

It may be safely assumed that on entrance at a preparatory school every boy is acquainted with the simple and compound rules. The work of the preparatory school may be understood to commence from this point. It is a fruitful cause of delay to waste much time over numeration and notation; for all practical purposes of the beginner it is useless to go beyond seven figures—in fact, hundreds and thousands suffice for most elementary work. There is nothing to be gained by very long sums; as a matter of fact they discourage by fatiguing small minds; better results in method and accuracy are to be attained by limiting the number of figures in a multiplicand or quotient to five or six than by courting inaccuracy by lengthy processes.

Now is the time to attack easy arithmetical problems, and the more these are adopted the better arithmeticians the pupils become. The sooner the notion that sums are to be worked by rule is dispelled the better; it is intelligence, not memory, that is to work the oracle.

There is no better training than the solution of easy questions by unitary method, and at this stage it should be thoroughly taught. Let all rule of thumb methods of so-called “rule of three” be once and for ever discarded, and let the pupil be taught to reason for himself from each question by reduction to unity, and there will be a manifest gain. After a course of fractions the questions can be made more difficult, but on the other hand their solution will be the easier by the knowledge of the use of fractions.

Factors must be utilised to the fullest extent, both in multiplication and division, and in the latter the true remainder should always be found. Facility in finding factors should be encouraged both as a means of shortening calculations, and as a

development of a quick power to perceive the constituents of a number. It is this same readiness which later produces the power to attack problems both in arithmetic and algebra.

A simple method easily caught by even young boys is as follows:—

What are the factors of 144 and of 999?

144			999		
1	×	144	1	×	999
2	×	72	3	×	333
3	×	48	9	×	111
4	×	36	27	×	37
6	×	24			
8	×	18			
9	×	16			
12	×	12			

It is easily seen that the divisors are here found in order 1, 2, 3, 4, 6, 8, 9, 12, 16, 18, 24, 36, 48, 72, 144, while for purposes of multiplication and division the pair most suitable can be selected.

G.C.M. and L.C.M. should be, whenever practicable, worked by factors, and it should be clearly impressed that cancelling in fractional sums is simply division by the G.C.M.

Vulgar Fractions.—Fractions are frequently deferred too long. As soon as a child can grasp the nature of $\frac{1}{4}$ and $\frac{1}{2}$, which he is ready to do very quickly from the fact of a tangible picture being conveyed to his mind, he should be taught to add, or subtract, other fractions such as $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{6}$, $\frac{5}{6}$, $\frac{1}{8}$, $\frac{3}{8}$, $\frac{5}{8}$, $\frac{7}{8}$, &c. and then he may easily proceed to easy fractions whose denominators lie in the same table of multiplication as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{6}$, &c. A simple geometrical figure will soon show him that $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$, &c., and he will readily adapt this to other numbers. In this way a valuable intuition into the nature of fractions is obtained, which has time to be thoroughly digested, and therefore infallibly grasped as a preparation for the later stage of unfathoming the mysteries of vulgar fractions. Nor will the mysteries be long undiscovered, for any child of intelligence, to whom the nature of a fraction has been properly explained, will dispose with so-called rules and work out his results by the light of his intelligence.

It is important to emphasise that the simplification of compound and complex fractions must be uniformly progressive, that is to say each part must be advanced one stage in each successive line, until all are alike homogeneous, either in *terms* or *factors*.

N.B.—The whole question *must* be set down and attacked at once; it is bad method to work by instalments; whenever possible, the sign of equality should be in the middle of the paper, the question on the left, and each successive stage of the solution on the right in column. It is also of importance that all calculation that cannot be made in the head should be shown on the actual paper; rough work on stray papers should never be allowed. For teaching purposes the rough work is equally valuable with

the final results, for it gives the teacher an insight into the course of reasoning that the pupil has adopted.

Decimal Fractions.—A good explanation of the law that governs our general scale of notation will simplify matters considerably, and in few cases will there be any difficulty in realising that the same decimal system that is used in the formation of whole numbers is naturally and simply extended below unity to represent fractions. Taking the units figure as the starting point, it is at once seen that tens and tenths, and hundreds and hundredths, &c., run in pairs, equidistant on either side of the units figure, the decimal point marking the division between whole numbers and fractions. The importance of local value in a clear understanding of decimal fractions cannot be too strongly urged. If once thoroughly made clear, the decimal point, instead of being, as it too frequently is made, a *bête noir*, is a veritable friend, and any difficulty in division is once and for ever dispelled.

Interest, discount, percentages, profit and loss, stocks, and all the host of so-called rules, (why "rules"?) are completely brought within the reach of an average intelligence by a thorough explanation of the definitions that give rise to the names, and it is not only needless, but destructive of thinking power to teach these as hard and fast rules. The application of reasoning by unitary method to the definitions will always provide the shortest and the easiest method of ascertaining the answers, one too that must be understood because it is the outcome of a logical train of thought. One need not emphasise this, because it will be manifest to all teachers that whatever can be attained by reasoning faculties must be indelibly fixed on the mind, while all that is acquired by memory will just as inevitably be an unreliable quantity.

There remain only problems of time and work, and those cannot be classified under a definite name. These are of great value, as inducing independent thought; and some slight knowledge of the relation between units of velocity, time and space will be required. This, as a matter of fact, presents no difficulty, and is easily acquired by a short blackboard demonstration.

As a general axiom it may be assumed that it is not possible to dispense with blackboard teaching. In fact the more the blackboard is used the better, and one can almost estimate the value of a teacher by the quantity of chalk he uses. Nor must the work be done entirely by the teacher; each pupil should be encouraged to do the successive lines of work, sometimes entirely, sometimes in turn with others, and it is a good plan after a demonstration to call upon one or more members of the form to reproduce it on the board so as to ensure a through grasp of the problem.

ALGEBRA.

The quantity of algebra that may be attempted with advantage by boys of preparatory age is not quite agreed upon. Some would wish to include indices, surds, and everything to quadratic equations (inclusive); others are of opinion that it is

better to omit all work involving the second power of x , so as to devote more time to simplifications, harder factors, and equation problems. There is much to be said on both sides, but taking into consideration the additional subjects in the shape of history, geography, and divinity now imposed on candidates for public school entrance, the writer is quite confident that more sound work can be done by limiting equations, &c., to the first power of x , granted always that in special cases the range can be extended to meet the special case. Though there may not be examinations on the additional work, yet no one would keep a boy within the ordinary bounds on that account. It is quite clear that a more advanced course in the case of any boys capable of profiting by it would lead to greater facility in attacking more elementary work, but to the general herd it would be detrimental in producing a rate of progression more rapid than they could adopt with benefit. Some boys of thirteen will easily reach and master the Binomial Theorem, but these are exceptions, and it is not wise to legislate for exceptional cases. They get their advantage in being placed in a higher division on entering their public school, and in scholarship examinations the style of the more advanced mathematician will in all probability attract attention, even in a more elementary examination.

There is no royal road to algebra. There is at first a certain amount of dulness and drudgery to be got through before the joys of lighter work can be reached, but it must be always borne in mind that factors are of the utmost importance, and it is impossible to make a boy too familiar with them in every form. Factors, identities and simplifications are the backbone of Algebra, as every teacher will agree. Equations and equation problems are another and scarcely less important point, and these should be multiplied almost indefinitely.

Perhaps it may be asked, at what age should algebra be commenced? Well, the answer cannot be given quite in this form; there is no special age, any more than there is a special age for beginning Greek. Each should be begun as soon as the boy is ready, and the sooner the better. Any boy that has gone through an elementary course of vulgar fractions should begin algebra at once and he will find no difficulty. It will be a year before he has got beyond the rudiments, by which time he will have made a considerable advance in his arithmetic; but it will be a year's gain, and one that if deferred can never be made up.

It is only necessary to add that as in the elementary arithmetic it was advised to accustom the beginner to easy fractions, so in the four simple rules of algebra it is also of advantage to introduce fractional coefficients and indices, and to vary the form of questions in division, so that there may be occasional remainders. It is unwise to graft the idea into a child's mind that all divisions must necessarily come out exactly. In fact, as a general rule, questions occurring in actual practice do not come out exactly, and the notion that a sum must be wrong because there happens to be a remainder is better avoided *in toto*.

It is a good plan after one term's algebra to alternate arithmetic and algebra in successive weeks. In this way a more substantial advance can be made than by alternating the lessons, and boys feel that they are making good progress.

EUCLID.

As soon as a boy is old enough to read easily, and to grasp, of course with a reasonable amount of explanation, the definitions of Euclid, he should make a beginning. Euclid, as taught in the present day, is no longer the grim bugbear that it was a generation ago. It can be made, and should be made, a very interesting subject, and one which little boys like immensely. From the very outset, easy problems can be attempted, and many of the definitions will suggest them to the teacher. The very first definition supplies a mine of material when taken in conjunction with those that follow it immediately, and there are plenty more that will suggest themselves, such as the construction of two equilateral or isosceles triangles on opposite sides of the same base, or a square with hinged corners, producing a rhombus, which should be proved as a proposition from the definition of a circle. The first proposition may here be asked as a problem. The axioms give also much opportunity for example and thought, and the eighth can be made eminently easy by the explanation of equality by superposition.*

Personally I always proceed at once to the fourth proposition, and it is seldom that there is any difficulty to be encountered. Problems should be worked at once upon this, one of the most useful of elementary propositions, and as a general rule it should be the practice to work problems on every proposition as it is done. As soon as a boy can solve an easy problem for himself, and it is not a long period of waiting, he will find no difficulty in understanding, and therefore remembering, any proposition, and the rest of the course of geometrical training is simply a question of time.

In consequence of the large number of problems that must be worked, if success is to be achieved, the first book takes rather a long time in proportion to those that follow, but it is not time wasted. It is better to confine a first course to quite simple problems, and to leave the more difficult to a second, or even a third course of reading.

Experience shows that in a first term a class of six or eight boys can easily learn thoroughly about six or eight propositions, as well as the definitions, axioms and postulates. It is well not to attempt too many, as the demonstrations must be carefully and exactly mastered—and as has been said above a large number of riders must also be done. During the next term it is not possible to determine any rigid limit, for it is now that the more mathematically disposed will leave the average boy behind. In fifteen minutes preparation one boy will easily do two or even three new propositions, others will find one as much as they can do thoroughly,

* Fuller suggestions on the "Teaching of Elementary Euclid" will be found in a paper contributed by the writer to the *Preparatory Schools' Review*, March, 1897.

but if it is borne in mind that every proposition successfully grasped is a step on the ladder, and that no steps are of any use at the top if intermediate steps are unsound, real progress will be made, even though slow and steady.

The enunciations and corollaries should always be thoroughly learned by heart, and clearly understood, for it is these that constitute the directions for the way, so to speak, and they are besides the only parts of the bookwork that are quoted in subsequent propositions.

The amount of Euclid that can be learned up to the limit of preparatory age depends entirely on the individual. With the majority three books form an amount that can generally be managed, while the more mathematically disposed will add the fourth and sixth books without much trouble in the same time. It is a good practice to work the greater part of the fourth book as problems, and this is certainly true of the first half of the book. A knowledge of the opening propositions of the sixth book gives a geometrical interpretation of ordinary proportion to which, in analytical form, by this time the boy is well accustomed in both arithmetic and algebra. Two lessons weekly of 50 minutes or one hour will be ample for ensuring a good knowledge. In this will be included preparation by beginners, but in the case of more advanced boys, an allowance of fifteen minutes twice a week in preparation will be of great value. Propositions should be written out neatly, all references put in the right hand margin, and the wording of the text insisted upon.

It is not advisable to attempt the solution of complicated problems; easy work alone is suited to minds of this age. In this way it is manifest that nothing is to be gained by unduly limiting, as some would limit, the number of books to be read, for even though the time that would ensure a good elementary knowledge of six books be devoted to three books only, there remains the incontestable fact that problems are limited to those suitable to the age. Too difficult problems defeat their object; and in a recent scholarship examination, where the candidates, who expected, as usual, six books, were confined to three without notice, the differentiation of the better mathematicians was almost defeated by the fact that the increased difficulty of the problems tended to reduce all to the same level.

CONCLUSION.

To sum up, quality rather than quantity is the essential of good teaching. The aim should be to develop thinking power, and this is best attained by careful explanation being followed by plenty of practical examples, varied as much as the ingenuity of the teacher will permit. Allow no hard and fast rules; let method depend entirely on the interpretation that is to be placed on the definitions; cultivate style, and the result will be the development of a really mathematical mind, as opposed to a memory that is likely to be treacherous in the hour of need.

C. G. ALLUM.

NATURAL SCIENCE IN PREPARATORY SCHOOLS.

Of late years much has been written and said in favour of the more extensive teaching of scientific subjects. And to such an extent has this been the case that some of the advocates of science teaching appear to regard a boy, educated wholly on these lines, and illiterate in every other way, as a desirable product.

But the reaction from this early specialisation is sufficiently strong, in the majority of cases, to counteract the over-zealous advocacy; and in connection with Preparatory Schools there is probably no danger of its occurrence. In their case a more general education is the object, and there is little prospect of a small boy being induced to give so much of his time to science as to interfere with his general education.

In Public Schools the teaching of science has only recently begun to take reasonable shape, and ceased to be a series of fireworks, or isolated physical phenomena, presented in a casual and indigestible manner to the pupil: while there has been so little of it in Preparatory Schools that its past and present state in these institutions does not require any long exposition.

Nevertheless, now that the large number of subjects included under the head of Science are more reasonably taught to elder boys and others, there has arisen a fairly widespread feeling, amongst both parents and schoolmasters, that some elementary information on scientific subjects should be given to boys whilst still at Preparatory Schools, and that these subjects afford valuable material for educating the minds of such boys. To their credit be it said, Board Schools and Girls' Schools have for some-time realised this fact, and in many of them scientific subjects find a place in the curriculum.

In Preparatory Schools the result of this inclination has been that several tentative efforts in scientific instruction have been made, and are still in progress at many of them, though nothing approaching the systematic "nature-study" of the young American has as yet been achieved.

The following short account seems to represent the various schemes at present in force, and, as will be seen, they appear to afford possibilities of much success with a slight amount of direction and co-ordination.

The practice which has found most favour is probably the occasional lecture. Either one of the staff or a stranger gives a lecture, with or without lantern slides, on some more or less scientific subject.

but if it is borne in mind that every proposition successfully grasped is a step on the ladder, and that no steps are of any use at the top if intermediate steps are unsound, real progress will be made, even though slow and steady.

The enunciations and corollaries should always be thoroughly learned by heart, and clearly understood, for it is these that constitute the directions for the way, so to speak, and they are besides the only parts of the bookwork that are quoted in subsequent propositions.

The amount of Euclid that can be learned up to the limit of preparatory age depends entirely on the individual. With the majority three books form an amount that can generally be managed, while the more mathematically disposed will add the fourth and sixth books without much trouble in the same time. It is a good practice to work the greater part of the fourth book as problems, and this is certainly true of the first half of the book. A knowledge of the opening propositions of the sixth book gives a geometrical interpretation of ordinary proportion to which, in analytical form, by this time the boy is well accustomed in both arithmetic and algebra. Two lessons weekly of 50 minutes or one hour will be ample for ensuring a good knowledge. In this will be included preparation by beginners, but in the case of more advanced boys, an allowance of fifteen minutes twice a week in preparation will be of great value. Propositions should be written out neatly, all references put in the right hand margin, and the wording of the text insisted upon.

It is not advisable to attempt the solution of complicated problems; easy work alone is suited to minds of this age. In this way it is manifest that nothing is to be gained by unduly limiting, as some would limit, the number of books to be read, for even though the time that would ensure a good elementary knowledge of six books be devoted to three books only, there remains the incontestable fact that problems are limited to those suitable to the age. Too difficult problems defeat their object; and in a recent scholarship examination, where the candidates, who expected, as usual, six books, were confined to three without notice, the differentiation of the better mathematicians was almost defeated by the fact that the increased difficulty of the problems tended to reduce all to the same level.

CONCLUSION.

To sum up, quality rather than quantity is the essential of good teaching. The aim should be to develop thinking power, and this is best attained by careful explanation being followed by plenty of practical examples, varied as much as the ingenuity of the teacher will permit. Allow no hard and fast rules; let method depend entirely on the interpretation that is to be placed on the definitions; cultivate style, and the result will be the development of a really mathematical mind, as opposed to a memory that is likely to be treacherous in the hour of need.

C. G. ALLUM.

NATURAL SCIENCE IN PREPARATORY SCHOOLS.

Of late years much has been written and said in favour of the more extensive teaching of scientific subjects. And to such an extent has this been the case that some of the advocates of science teaching appear to regard a boy, educated wholly on these lines, and illiterate in every other way, as a desirable product.

But the reaction from this early specialisation is sufficiently strong, in the majority of cases, to counteract the over-zealous advocacy; and in connection with Preparatory Schools there is probably no danger of its occurrence. In their case a more general education is the object, and there is little prospect of a small boy being induced to give so much of his time to science as to interfere with his general education.

In Public Schools the teaching of science has only recently begun to take reasonable shape, and ceased to be a series of fireworks, or isolated physical phenomena, presented in a casual and indigestible manner to the pupil; while there has been so little of it in Preparatory Schools that its past and present state in these institutions does not require any long exposition.

Nevertheless, now that the large number of subjects included under the head of Science are more reasonably taught to elder boys and others, there has arisen a fairly widespread feeling, amongst both parents and schoolmasters, that some elementary information on scientific subjects should be given to boys whilst still at Preparatory Schools, and that these subjects afford valuable material for educating the minds of such boys. To their credit be it said, Board Schools and Girls' Schools have for some-time realised this fact, and in many of them scientific subjects find a place in the curriculum.

In Preparatory Schools the result of this inclination has been that several tentative efforts in scientific instruction have been made, and are still in progress at many of them, though nothing approaching the systematic "nature-study" of the young American has as yet been achieved.

The following short account seems to represent the various schemes at present in force, and, as will be seen, they appear to afford possibilities of much success with a slight amount of direction and co-ordination.

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The next place is occupied by Botany of some sort—but, unfortunately, mere Systematic Botany, consisting of the finding and naming of various flowers and weeds, is the rule.

After these two efforts the instruction is of an even more vicarious nature, consisting of scraps tacked on to geography or some other work, ranging from cyclones and thermometers to the distribution of animals. Lastly, in one or two places systematic attempts are made at teaching some given part of Chemical or Physical Science, such as the properties of Air or the Laws of Heat.

Now, it will be seen that such attempts as the above, in most cases, are singularly lacking in those essentials which are supposed to constitute good teaching. There is no uniformity, no continuity—in fact, in their nature they too much resemble the “General Information” column of the modern cheap newspaper. And yet some good results have been produced, for these courses have tended to stimulate the mind and improve the reasoning powers of those boys who have had sufficient intellect to select the good from the chaos offered to them. So that for this reason alone one is tempted to consider whether there are not claims for, and advantages in, the teaching of scientific subjects such as to justify their inclusion in the curriculum of Preparatory Schools.

If properly managed, there seems to be little doubt that scientific work tends to truly educate the minds of even quite young boys. Certainly, their powers of manipulation and dexterity are visibly improved by a small amount of practical work entailing the use of their fingers and eyes.

As regards the use of the latter, the difference between a small boy's powers of seeing the features of some given natural object, when he has been taught to use his eyes, and his inability with an untrained eye to see the same things, until they are pointed out to him, is worthy of more than passing notice.

In the same connection this ability to see more leads to a wider range of thought and a greater knowledge of the powers of language for descriptive purposes. Moreover, the powers of reasoning are given fuller play in this manner than in the majority of taught subjects, if it be so arranged that the pupil has to suggest explanations and to arrive at conclusions for himself, subject to the correction of the master.

So that the advocates of this teaching of science would maintain that in the sum the advantages of increased powers of observation and manual dexterity gained from it justify it as a convenient and teachable subject for those ends. This leads to perhaps the most debatable part of the question, viz., the subjects to be taught and the methods to be employed.

Considering the various possibilities in turn, Chemistry, in virtue of its long-standing position, as the subject most taught in Public Schools, naturally suggests itself.

But the teaching of Chemistry involves a considerable amount of apparatus and a room more or less adapted to the purpose, and it

is far too difficult, in any form in which it has been so far suggested to teach it, for preparatory school divisions.

These objections seem insuperable, and, in addition, in the one or two cases where it has been systematically tried, to the writer's knowledge, it resolved itself into qualitative analysis which, though pretty and instructive to a fair chemist, is an unjustifiable waste of time for a young boy.

Of course, it is possible to draw up a series of chemical experiments, of a more or less "fireworks" nature, which will entertain a small boy, and possibly to a slight extent add to his stock of knowledge—for instance, a series illustrative of breathing, burning, and decay.

But at the same time the probability is that such a course will not, to any true extent, educate a boy without any preliminary knowledge of the subject. It is far more likely to be to him a series of isolated facts, to be learnt like so many grammar rules, than a means of improving and training his powers of reasoning and deduction in the manner which can be effected with other subjects.

Moreover, it is not safe to set small boys to perform chemical experiments for themselves, and it seems, as will be insisted on below, that scientific teaching unaccompanied by individual practical work is not of much value.

Finally, it becomes more evident every year that the study of Chemistry is far more profitable after some elementary knowledge of the physical properties of matter has been gained; and it is certainly far easier to teach Chemistry to boys having some such preliminary knowledge than to those who lack it. On all these counts, then—viz., expense, impossibility of practical work, and advantage of postponing its study, Chemistry seems to be an unsuitable subject.

Physics naturally follow; and if by this term one means the normal courses of Electricity, Light, Sound, etc., then Physics are as useless as Chemistry for the present purpose. But if, on the other hand, one includes under this term instruction in common sense and manipulation, by means of experiments dealing with physical apparatus and phenomena, the case is entirely altered.

Since the development of science teaching for small boys is of comparatively recent origin, it is not amiss to indicate what is intended by the above.

Take such a subject as Heat. As commonly taught from text-books with a view to examinations, it consists of formulæ of expansibilities, radiation, etc., and the suitability of the subject is not obvious. But limit the instruction to proof of the effects of heat and their application, *e.g.*, making of cannon, tiring of cart-wheels, laying of railways, bracing of buildings, bursting of frozen waterpipes, etc., and a thoroughly suitable course, well illustrated by experiments, can with a little trouble be evolved. Or for the higher forms, the uses and making of thermometers, of barometers, proofs of atmospheric pressure, the working of

pumps, and so forth, will afford a groundwork which can be built into a course of instruction thoroughly within the grasp of Preparatory School boys.

At the same time a series on these lines can be easily arranged so as not to consist of isolated scraps of information, but of a continuous course in which the pupil depends as much on his own brain as on the information supplied to him. But as in the case of Chemistry these courses may appear only to provide lecture material, though of a suitable kind. So now to come to the most vital point of the whole subject. Whether the matter to be taught be designated Physics or no is of little importance, but the one certain thing is that the work must be chiefly of a practical nature. This result is slowly being achieved in those Public Schools where the science work is under intelligent supervision; and it steadily becomes more evident that even older boys derive but little benefit from a weekly or bi-weekly science lecture unaccompanied by practical work of their own.

However well the lecture may be given, and however well illustrated by experiments, it in no way compares in value to the time spent by boys in doing similar work themselves. One cannot overcome the ingrained habit, acquired from long hours spent in classical work, of regarding a lecture as providing an isolated selection of facts and theories to be remembered.

The above, of course, must not be understood to detract from the value of lectures when accompanied by the pupils' own practical work. In this case lectures afford, if not the only, at all events the most satisfactory method of instilling the theories and amplifying the information bearing on the work in hand; but, comparatively, the lecture alone is far out-distanced in educational value by the combination of lecture and practical work. For the abstract conception of the subject, gained from lecture work alone, is lost when the individual is performing his own experiment, and finds the hundred-and-one small difficulties to overcome in bringing it to a successful issue. And although the value of practical work for elder boys in this branch of education cannot be over-estimated, it is even of more importance when dealing with the younger mind.

The advantage derived from the information being conveyed in a concrete rather than an abstract form, the gain in manual dexterity and in accuracy of observation are so self-evident at the end of a term's trial as to fully reward the extra expenditure of time and trouble in arriving at the result.

Now this plea for practical work may conjure up such alarming ideas of laboratories, apparatus, and so forth, as to seem to forbid it out of hand.

But this alarm, if it exists, is wholly unwarranted. It is, like most of the objections raised to starting scientific work, the result of approaching the consideration of the subject from the standpoint of a wholly classical education and without

knowledge of the methods and form of instruction in science necessary for small boys.

As above pointed out, Chemistry is unsuitable for the purpose in hand, especially as no intelligent work at this subject is possible without some previous physical training. It is difficult to find a name for the physical subjects which should be taught in Preparatory Schools, but "Kindergarten Physics" might do. At all events they would be so termed in derision. So the name may as well be forestalled.

This preliminary instruction should consist almost entirely of the making of simple measurements. With a balance, a few yard-measures, some cardboard, scissors, calipers, tape, and so forth, the class-room can be fully equipped as a laboratory for this purpose. At the same time not merely linear measurement must be understood, but complete measurement of physical properties. This is not the place to suggest a detailed course, but the main idea, kept throughout, must be that the pupil is learning to measure in a concrete manner. Any mathematical master well knows how a concrete example tends to help the acquisition of knowledge on the part of a young boy. If there is one who does not, let him try to teach a class the value of a sixteenth by figures, and another class by cutting up a cake into sixteenths, and note the result. Or that $\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$ by using the black-board and figures rather than by marking a cardboard rectangle into the desired fractions, then cutting out and adding together the portions obtained.

This "Kindergarten Physics," then, simply consists of elementary concrete mathematics, the learning of a measure by using and seeing it, rather than by hearing of it, with the result that a boy learns comparatively quickly that milk is not measured by yards.

Thus at one and the same time a carefully-prepared course affords most excellent material for the teaching of elementary concrete mathematics, and for the education of the powers of observation, accuracy, and dexterity in manipulation of any boy over the age of nine.

To take one more instance, practical exercise in such propositions as the forty-first and forty-seventh of the first book of Euclid are comparatively easy. Any boy can measure and cut out the necessary squares and triangles as a practical exercise, and the subsequent understanding and learning of the proofs by the normal methods are rendered far easier. For in this case the pupil starts fully understanding what is going to be proved, and knowing from his own work that it is true; while the terms employed are not mere combinations of letters, but have a definite meaning and value for him.

The results of only forty-five minutes a week devoted to such work are, to the writer's mind, so extraordinarily effective, as compared to results obtained in the stereotyped manner, as to fully justify the time required.

It may be the novelty, or the sense of doing the thing oneself, and not learning it in a book or from a master; but, whatever the cause, the effect indubitably exists.

And the effect is that the boys are keen and take an interest in the work—even talk about it out of school—are anxious to get on to the next experiment, which can only be accomplished by successfully achieving the last. Moreover, for the greatest fool there is always that charm present, as in the game of golf, that improvement and success are continually being experienced. There is no feeling of—"I can't get on at this"; "Never get a sum right." In a good series of experiments practice is bound ultimately to produce the desired result, and the present effort is normally less bad than the previous failure.

In addition to the advantage of the simplicity of the apparatus there is the fact that, being really an "anhang" to mathematics, there is no need for a specially qualified science master.

These courses are only now in the process of being evolved for the lower forms in those Public Schools where the science teaching is losing its archaic character, and practical work forms part of the curriculum of every boy who learns science. Consequently the Preparatory School Master cannot hope to find a perfectly suitable text-book ready written for him.

Although considerable headway has been made in America, and more recently over here, it still means solidly finding out by experience the best course, *i.e.*, the course most adequate for educating the particular boys and suitable to the local conditions, and this involves no mean amount of painstaking work. In short, unless the teacher is prepared to throw himself thoroughly into the work and overcome the difficulties attendant on starting a new subject, the time required is better employed at present. Disbelief in the efficacy of the work, or disinclination to take trouble with it, will insure failure and throw discredit on a system which is capable of producing very valuable results.

There remain for consideration Biological Subjects, in some ways more easy, in others more difficult, to form an opinion about. For already in many schools, in the form of lectures and collecting for the school museum, *i.e.*, a shelf in the library cupboard, a groundwork exists connected with these subjects. In addition, the idea of the teaching of science in Preparatory Schools is with many people identical with the teaching of Botany, presumably because it is already taught in most girls' schools. In connection also with Biology comes the tendency of the small boy to form collections of butterflies, eggs, or plants.

The fact that boys so collect these objects is no doubt in the first place merely an expression of that eagerness for possession exhibited also in the acquiring of stamps and nibs, culminating later on in the amassing of china and bric-a-brac. But it also shows that a boy's mind considers there is some interest in the living objects round him, since they seem to him suitable for the purposes of collection. But the above condition of affairs

seems to contain very considerable possibilities, and it is a great pity that the material provided is not made of more use, for by the expenditure of a little energy in direction and superintendence quite satisfactory results may be brought about.

Unfortunately, the teaching of Botany has hitherto consisted almost entirely of Systematic work—the learning of a large number of names and of certain rules by which the plants found may be referred to their natural orders.

Now, when the immense advantages of Botany as a teaching subject are considered, it is extraordinary that an interesting and instructive method of using it as such should be a quite modern proceeding, and it is to Germany that the credit for this departure must be given.

For teaching purposes the Natural History of Plants affords the best results, not tables of classification and explanations of long terms, but the object and use of each characteristic structure of the plant under discussion. Why a chestnut fruit is prickly or a nettle stings, why some flowers are bright and others dull, why the bramble is thorny or a pea has tendrils—in short, the object of the tremendous variation in structure found throughout the Vegetable Kingdom, from the Venus Fly-trap to the folding of a blade of grass. A course of Botany on these lines affords in every way a medium for scientific work of good educational value. There is, too, the additional advantage that in the case of most Preparatory Schools the material for practical and field work grows all round the building. Any playing field supplies sufficient variety for a large amount of work, and the drawing of diagrams and examination of specimens in the class-room can be alternated with field classes to whatever extent appears desirable.

No other biological subject can offer the same advantages as Botany for teaching purposes. In the case of Animal Natural History the living material is never so easily, if at all, obtainable. But, as above suggested, much more than is at present the case might be done by the superintendence of the making of collections.

Just as in some schools the formation of stamp-collections is encouraged and used as a means of teaching geography, in the same way a boy's powers of observation and description may be educated by means of his butterfly, egg, or fossil collection.

But this collection must not merely consist of sticking pins through a certain number of insects and fastening them in a box with the name somewhere near. The educational part of the collecting must take the form of some sort of illustrated diary; and the entomologist must be made to work at his hobby from the egg to the imago. All such collections should be made under the general superintendence of a Master. In some cases the making of collections might even be insisted on as part of the curriculum.

A boy who can write a fair account of the life history of some butterfly or moth, describing the caterpillar, its appearance, food,

habits, moults, and so forth, has acquired certain powers of observation and description which are by no means to be despised. In order to encourage the development of this power, the preparation of such an account may be required from all who make collections, and special aptitude in such work recognised by the award of prizes.

Botanical collections, birds, fossils—in fact, all the objects included in “Nature Study,” may be treated in the same way. And, although this may seem but the thin end of the wedge as regards science-teaching, the results obtainable are well worth the trouble required, whilst incidentally a wholly fresh interest may be imparted to that often dreary function—the Sunday walk.

It is, however, very difficult to impress the value of this form of “nature-study” on those to whom it appears trivial. But if a dozen boys are set down to write such an account as the above at the beginning of term, and again at the end of the term, after the intervening twelve weeks’ practice under supervision and correction, the difference in the results will convince the most sceptical. Provided always that the sceptics are prepared to allow that increased powers of observation, description, manipulation of delicate objects, and knowledge of some branch of Natural History are of educational value.

Connected with this utilising of an already existing habit for educational purposes comes the question of the occasional lecture. Presumably head-masters consider lectures of some value in that they arrange for them at all, but if they are of any use it is worth while to make them as useful as possible. The present system, by which there is a lantern lecture, and then probably an interval of three or four weeks before another on a wholly different subject, is open to improvement.

Let it be decided that in the winter months lectures—lantern, if possible—shall replace evening preparation for one night in the week. Saturday is usually the most convenient. At the same time let the nine or ten lectures so to be given centre round some given subject, which involves taking the necessary trouble to provide lecturers on this subject.

In the course of the week a short paper should be set on the previous lecture, and at the end of term a general paper on the course. This latter paper must have a definite value in marks, and not be made farcical by the removal of one of the normal incentives to excellence employed in the ordinary curriculum. Such a system is already practised with advantage in the case of geography and history, and can be extended to scientific subjects with satisfactory results.

In the case of “nature-study” and lectures, then, excellent material for scientific teaching already exists. There is only the need of a little supervision, encouragement, and stimulation from the head-master for this material to be used as a valuable factor in the education of Preparatory School boys.

To sum up, so long as the teaching of science does not add to the curriculum it is necessary that, in some form, it should find a place in the education of smaller boys.

Development of the powers of observation, manual dexterity, and descriptive writing justifies this inclusion more than the actual scientific knowledge gained. In fact, it is but right to point out that the work suggested will not help a boy through a Public School entrance examination, nor much when he gets to the Public School. Its educational value is none the less great.

However, in the case of Mathematics, a valuable addition to the methods of teaching this subject may be found in a course of practical measurement of the physical properties of bodies. And in all attempts at work under the name of Science, work of a practical nature must be provided, if the full educational value is to be obtained.

Chemistry is not a suitable subject, since it is to a certain extent dangerous, liable to be regarded as isolated pieces of information, and requires some previous knowledge of Physics.

Physics of a simplified and elementary nature afford excellent material for both practical and lecture work.

Amongst Biological subjects Botany occupies the place of Physics, having the further advantage of the material being usually ready to hand, but the disadvantage of requiring a special knowledge for its proper teaching.

More use might be made of lectures given at regular intervals, and arranged with more regard to sequence of subject.

The study of Nature should be encouraged, while the formation of "collections" should be sternly suppressed, unless sufficient patience and perseverance are shown in the observation of the habits and natural history of the living forms studied. In the case of geological specimens, accurate and descriptive accounts of the object, and of the locality where it was obtained, should be insisted upon.

Finally, the above remarks and suggestions are made, more with a view to what is rendered possible in the way of Science teaching in Preparatory Schools by their present condition, than as representing the ultimate "best possible." There is the danger that these subjects being novel, and seeming to an older mind of an obvious nature, may be approached in a casual or contemptuous manner, as regards their educational value, by junior members of the staff. If this is the case, Science-teaching in such a Preparatory School would be of no advantage to the boys and is far better avoided.

ARCHER VASSALL

THE TEACHING OF DRAWING IN PREPARATORY SCHOOLS.

ITS SPECIAL DIFFICULTIES—SHORT TIME—NO CLASSIFICATION FOR DRAWING—ITS EVILS.

As we are not to consider how drawing may best be taught, but how it may best be taught in Preparatory Schools, it may be well first to consider what difficulties and limitations the special conditions of the case impose on us.

In the first place, only a short time can be given to it—generally one short school hour a week. This must be considered, lest we fail by attempting too much. Then the Drawing Master in a Preparatory School has to deal with classes, often *large*, arranged according to proficiency in other studies and with no regard whatever to capacity for drawing. This last is the most serious difficulty in the way of the satisfactory teaching of drawing in Preparatory Schools. In the ordinary Art School few students present themselves who have not somewhat special talent or inclination for Drawing. Each is set to the work he is most needing or most fitted for. His liking for the work impels him to do his best, and by means of a staff of masters he receives such attention and assistance as he needs. We, in the Preparatory Schools, have to teach boys a subject for which aptitudes vary very greatly in classes formed with no reference whatever to these great diversities. As a consequence, we do not get the best possible results from any of our pupils. Boys with fair drawing capacity are happily the majority, but in all the higher forms their progress is retarded almost to the pace possible to the dull ones, while the really artistic boys are always kept at work much below their powers.

Many young boys with a talent for drawing (which has, in some cases, received considerable attention at home) enter a school, naturally enough, in its lowest form, yet to keep them long in Standard I. and II. in drawing is like keeping them at pot-hooks and hangers, when they can already write fairly well. On the other hand, there are many clever boys who have unskilful fingers and but little sense of form. If these could be left longer in the preparatory stages of training in drawing, probably they would get soundly grounded and start hopefully. As it is, they get deservedly promoted for good work in other subjects and find themselves unwillingly confronted with the greater drawing difficulties of the higher form, though they

know they have proved unequal to those of the form they have left. The result is often a hopeless feeling that they will never be able to draw, which sometimes deepens into dislike for a subject in which they feel themselves conspicuously backward. It will readily be imagined what a hindrance such boys are to the rest of the form, and what a thorn they are in the side of the Master.

It often happens, too, that boys of ten or twelve come from other schools and go at once into the middle and upper forms, who have previously done little or no drawing. These have to commence the study in Standard IV., with obvious disadvantage to themselves and the rest of the class.

The suggestion will probably occur that such boys and backward boys, though working among more advanced boys, should be given easier work, but when the conditions of collective teaching (which I am shortly to describe) are taken into account it will be seen how difficult, if not impossible, this is.

COLLECTIVE TEACHING.

Large classes of boys of varying capacity necessitate what is called collective teaching. In an Art School each is set to his own work, towards which he has sufficient inclination to keep himself going satisfactorily, with the occasional assistance of a master. At the Preparatory School, if a separate model were placed before each boy in the lower forms, many, if unaided, could not make a start, few would make much effort, and some would go wrong at almost every line. The small space of time the Master would be able to give to each of the 20 to 25 boys would be wholly insufficient to enable any but the most gifted of them to produce a moderately satisfactory result. This difficulty has led to collective teaching. A large flat copy, placed in view of the whole class, is described by the teacher, who directs, step by step, the whole class in the drawing of it—probably himself drawing it line by line on the blackboard. He should leave his rostrum between each direction, and try to get round to each boy in the class to see that his instructions have been carried out. With simple flat copies he will, if energetic, experience little difficulty; except, perhaps, in keeping quiet the quick boys, who do what he tells them at once, and are sometimes unoccupied while he is working round the class, bringing on the slower ones. In the higher forms simple objects take the place of flat copies, and the difference between the best and worst among the pupils is continually increasing, as is also the difficulty in describing, directing, and demonstrating the drawing of the more complex models. If the Master gives separate subjects to one or two boys, he will find it very difficult to snatch a few minutes from conducting the main body of the class to help the separated pupils. Those few minutes will prove insufficient for the purpose, and will generally give an opportunity for idleness and consequent disorder in the rest of the class.

EARLY TRAINING OF INFANTS.

By the early training of the eye and hand, a good deal may be done to lessen these natural inequalities which occasion so much trouble in our classes. There is little doubt that such training may well be among the first a child should receive; it is so easy to make it a form of play, and it is the natural means by which a child is taught to recognise and draw its letters. A small blackboard and a piece of chalk should be in every nursery, for it is easier for a very small child to control its hand and fingers on a large space than on a small one, and it is better that it should stand to its work, or, if sitting, should draw on an upright board, than bend over a slate or a piece of paper. Straight lines connecting two dots (which should be done by the nurse) are easily made by very young children, and great is the delight when a few of these lines are found to form a flag. Eggs, too, of varying sizes and proportions are easily drawn and gleefully whitened into resemblance. In the Infant School and Kindergarten there are great opportunities for valuable eye and hand training, and these schools should, by the time the child is seven or eight years old, have done a good deal of the preliminary work.

A GRADUATED COURSE — FOR INFANT AND PREPARATORY SCHOOLS, STANDARDS I.-VI.

We must plan out our work into stages, and the "Course of Instruction" prescribed by the Science and Art Department, in its "Illustrated Syllabus" (Eyre and Spottiswoode, 1895), seems to me so carefully graduated, that I think we cannot do better than adopt its seven standards as a kind of fundamental plan, to be altered as special circumstances may suggest. It is also very desirable to give careful attention to the "Alternative Illustrated Syllabus" issued by the Science and Art Department at the same time. This last combines some of the ideas of the Kindergarten with what may be called freearm drawing, and, from the beginning and all through the course, it aims at giving the pupil freedom and facility, and at familiarising him with the elemental forms in all possible inversions and combinations, thus educating the inventive and designing faculties. It seems to me specially desirable that teachers of young children should combine some of the methods of the "Alternative Syllabus" in the three lowest drawing classes with those of the ordinary "course" in Standards I., II., and III.

The youngest may begin with freearm drawing on slate, blackboards, or blackened millboards, of ellipses encouraging the hand to pass again and again freely over the same curves, then slightly varying the forms of the ellipse as suggested in the syllabus. Freearm lines should be drawn from dot to dot. In the second stage pencil and paper may be used for the same exercises, and the curves and lines should be varied, inverted, and combined into simple

patterns. This, with exercises in the use of the ruler, may suffice for Standard II.; but if children are kept long in these standards—as, if they begin young enough, they ought to be—the simple brushwork exercises of the Alternative Syllabus would no doubt be interesting and profitable. These, if commenced in Standard II., may be continued in Standard III., but I think they are not desirable after that stage, as I am of opinion that the continued practice of the kind of brushwork there recommended would be more likely to form bad habits and to produce an undesirable mannerism than to be of any after use in painting.

A boy should have done work equivalent to that of the first and second standards before he comes to the Preparatory School, but, as it frequently happens that he has not done so, it is necessary for us to start as low down as Standard II. as just described.

In Standard III. the work should be principally from flat copies, similar to those recommended by the Department in its ordinary course for this standard. They should, however, be combined with the judging of angles and proportions, with simple drawing to scale, with dictated drawing, elementary designing, and drawing from memory. The teacher may derive very valuable assistance in these matters from the works of Mr. Ablett and Mr. E. R. Taylor, of Birmingham. He is more likely to make these very useful exercises interesting to pupils at this stage than after they have felt the importance of drawing from real objects. When that course is entered upon (as it is in the next grade) there is so much to be done before the time for leaving the Preparatory School in training to a precise observation of form, of relative depths of tone, and in mastering such elementary perspective as will assist in the drawing of simple objects, that I think it is desirable to put away the Alternative Syllabus at this point, for, though it is admirably adapted to develop powers of design, it almost ignores the training of the faculties of observation and representation.

I regard the work up to this stage as most important. When it has been commenced early and been well done it will take most of the difficulty from the rest of the course.

In the next stage (analogous to Standard IV.) the flat copies provided by the Department may be used, but in my own practice at this point I have almost wholly superseded them by easy common objects. These are much more interesting to the pupils, who feel that they are now actually drawing real things and not from copies. There is, too, the great advantage in our too-mixed classes that the model provides a study in outline drawing which even the backward boys can achieve, and in addition a study in real shading for the more advanced ones at the same lesson. The eagerness to shade, which seems almost universal, should be used to induce boys to take greater care with the outline, a good outline gaining the privilege of shading.

Whether using flat copies or simple objects it is always well to begin by requiring each boy to estimate, as well as he can, the actual measurement in inches of one or two of the principal

dimensions of the model or copy, and to write such measurements at the top of his paper. When this has been done the teacher should give out the correct measurements. Boys whose estimates are not correct are not to rub out their figures, but to strike the pencil through them and write the correct measurement beneath it, that it may remain a record of their judgment, to be considered if marks are awarded. If the largest measurement is too large for the paper another suitable one is decided on for the chief line, and the rest are judged very carefully in relation to it. The great importance of taking pains to insure correct proportions should be well impressed on pupils, as no subsequent work, however beautiful it may be, will compensate for a mistake in proportion; which, however, is a mistake very likely to be made. Boys should be made to get into the habit of carefully testing their estimates of proportion by means of the upheld pencil or ruler.

The models should be carefully measured in all parts by the teacher beforehand, and if they are to be drawn smaller all the measurements must be reduced beforehand. Collective teaching is made much easier if, after allowing time for the boys to estimate and block out a part, the teacher is able to tell the whole class what that part should measure on their papers, and to insist that all should correct their drawings to that measurement.

With flat copies the teacher may find it advantageous to draw each line step by step on the black board, as the easiest way of describing the part next to be drawn; but with real objects this is less possible, because of the varying aspects of the model, and less desirable, as a white line on a black board is a confusing conventionalism in representing a coloured object to be drawn in lines and tones of black on white paper. My own way is to have large boards covered with white paper as backgrounds for my models, and on these I draw with charcoal any difficult passages of drawing or shading. Of course, it is frequently necessary to work on the boys' drawings, both to correct and to show how the pencil should be used.

It must be owned that there are such difficulties in the way of adopting objects as drawing models for class teaching in the lower forms that some very excellent Art Masters (among them no less an authority than Mr. E. R. Taylor) regard it as undesirable to attempt it. My own experience, however, has convinced me that boys learn much more from them than from flat copies, and are much more keenly interested in them; so I consider it well worth while to face the difficulties.

The varied aspects the object presents in different parts of the class-room form the principal difficulty, and make it impossible to demonstrate its lines, proportions, and planes from any one spot in such a way as to be intelligible to pupils sitting in other parts of the room. In the forms analogous to Standard IV. the objects must be circular (as a circular vase, bottle, basin, or pilaster), as these are the same from all parts of the room; or flat or nearly so, a flat object being like a flat copy.

In Standards V. and VI. I follow the same course, but with more difficult subjects. When the model is not quite flat or round it is desirable to have several models exactly alike in measurements in all respects. I have found that, when not quite flat or round, a separate model is needed for every eight boys sitting in four rows of two each, behind each other. But as in this arrangement the two boys farthest back frequently do not see the model well, owing to the distance they are from it, it is well to consider one model needed for every six boys. In rooms which have a part insufficiently lighted, or lighted by cross lights, I have found it well to make a black and white drawing of the actual size of the model, shaded in full strength and in true relations of tone, and to cause the eight most backward boys in the form to sit in the cross-lighted part of the room and draw from my drawing, while the others work from the real objects—three objects just alike and my drawing sufficing well for a class of twenty-four boys. I find the plan a good one in other respects, as my drawing sets a higher standard of imitative realism than would otherwise be attained, and causes strenuous efforts on the part of some of the boys to equal it.

I think it desirable, from the beginning of Model Drawing, to teach what artists call breadth of sight—the seeing of the object as a whole with all its parts in just relation to each other and to the background, in size, depth of tone and qualities of texture.

SHADING.

On the subject of shading I am strongly of opinion that it is most natural and best for boys to try to render the relative values of the objects in full strength and in right relation to the background, and not to potter for years with conventional straightline shading or delicately stippled pale tones.*

Clumsy and backward boys must be kept from shading until they have ceased to be clumsy. I am quite aware there will be some heavy, dirty drawings, but they will at least show an intelligent endeavour to render truly the tones of the object.

I find the technique of shading a singularly individual matter. Many boys seem intuitively to have quite excellent methods—too subtle to be imitated or taught to others. The teacher should carefully watch his boys in this matter, and interfere as little as possible, only requiring that the relations and gradations shall be properly rendered, and seeing that all irregularities and defects which suggest wrong textures are avoided. The stump may be used, as it increases so greatly the range of tones to be got from the lead pencil; but boys who are skilful should be

* I believe the weakness of much English painting in values arises from the artificial methods of shading in which most of us were brought up at school, and to the over-delicate stippled shading from casts, separately and in parts, without relation to the whole or to the real background, which was the practice of the schools of Art.

encouraged to do without it, and those who are unskilful should be continually warned of its liability to make dirty, messy drawings.

It will be found very difficult to get sufficient suitable objects—and objects in duplicate and triplicate—to keep up a constant succession of models properly apportioned to the classes fit for them. Indeed this (and the mixed nature of the classes) militates against a strict gradation of the difficulties. I have frequently given one set of models to four different forms, and have not noticed any striking difference, per form, in the results. The best boys in the highest form will of course do the best, but the worst boys in that form will be easily excelled by the best in the lowest of the four forms.

My own experience has been principally in the work of Standard IV., as I have described it, and the forms above it. I have frequently noticed that the highest and lowest forms are the easiest and most satisfactory to teach. Nearly all boys commence the study of drawing objects with very considerable interest and keenness. In the next two forms those who have proved to be below the average in drawing (but who are nevertheless promoted for other reasons) are apt to be disappointed, inattentive, and sometimes sullen. By the time the highest form is reached the sullenness has generally yielded to discipline, and the incapacity has been lessened by training and general development.

Teachers must be fertile in expedients to add to the difficulties of the model during the lesson in order to keep the quick boys occupied to the end; and sometimes this may be necessary for the whole class. Memory drawing will frequently very profitably answer this purpose. About twenty minutes before the close of the lesson the models may be removed, the page turned over, and the boys asked to make a small drawing from memory—a definite length being prescribed by the teacher, who should previously have made a small drawing of that length very carefully as the best means of showing mistakes the boys may make in proportion. This is often a very satisfactory part of the lesson. All invariably do their best, and the teacher finds out who have understood the lesson and worked intelligently, and who have merely got through anyhow.

PRACTICAL PERSPECTIVE.

I do not consider it advisable to attempt to teach more perspective in the Preparatory School than is necessary to secure the right drawing of a cube or a square prism, but I regard this as of such great importance that I commence it in Standard IV. and continue it in each form every term. And it is of just as much importance to teach the practical application of this knowledge, for I have known holders of the South Kensington

perspective certificate who could not draw a cottage from nature in correct perspective.

Each term, for all forms from Standard IV., I place a box in one corner of the class-room. Each term each class writes from dictation two simple perspective rules. These are then explained and exemplified by reference to the model and other objects in the room. Each boy is required to draw a small vertical line at the top of his paper to represent the nearest vertical line in the model, and, having done that, to find what part in the model is level with his eye, and to draw a horizontal line above, below, or through his vertical one, according as his eye is above, below, or level with the model. Considerable care is necessary at this point to see that the horizontal line is drawn in the same relation to the small vertical line already on the paper, as the imaginary line level with the boy's eye stands in to the box—taking its nearest vertical line as the standard of measurement. The angles formed by the highest receding lines are then carefully judged by means of the upheld pencil and drawn. They are then extended till they meet the line of sight—the vanishing point—and the other lines parallel to these first two are also extended to the same vanishing point. The smallness of the size of the drawing admits of these lines being extended on the paper to the vanishing points—if the books are opened longways. The relative widths of the two receding sides of the box are then carefully judged by the upheld pencil. When these are settled the remaining two vertical lines are drawn. The box is then moved to the other corner of the room, where it is placed at a different height. Its relation to the line of sight is again considered and it is again drawn. In the higher forms, the writing of the two rules, the explaining of them, and the drawing of the box in two (or even three) positions may be got through in the hour's lesson. Next week the box is in the same place and is drawn in the same way, but this time of a larger size—say, four to six inches high. When that is satisfactorily done a model, say of a church tower with bell-chamber windows, clock, etc., of the same size and proportions as the box, is put in place of it and finished in light shade and detail. The next term a box of different proportion appears, and the whole is gone through again—dictated rules included—and the following week it is found to be, perhaps, a solid cross, perhaps a cottage with door, windows, chimney, outhouse, etc. Following the church tower model I have given the higher forms a landscape design in charcoal in which a similar church tower appears. This was drawn in perspective as before. The landscape was composed to form a text for a lesson in sketching from nature preparatory to the summer holidays. This lesson was also illustrated by a small exhibition of about thirty original black-and-white drawings in wash, line, and pen work, on white, grey, and Gillott scape-tint paper. It was further illustrated for the most promising boys by Mr. Ruskin's drawings in Vol. V. of *Modern Painters*.

By repeating, term after term, the rules, the box, and a practical illustration, I hope to vanquish this simple yet formidable difficulty entirely, for at least some of my mixed pupils, and to have laid a good foundation in all of them for further work at the public schools.

So far the course described is that which is given by means of one lesson a week—of something under an hour. It depends on the teacher whether it is only a useful training of eye and hand (which, however, I think is all one should expect), or also a training in appreciation of unnoticed qualities in everything we see, and a preparation for Art. William Black wisely says, "The eye should be trained to observe the beauty of all manner of simple things so that we may increase the value of life." If the objects drawn are selected with care very considerable interest and beauty will be discovered in them by those who draw them carefully; and when shading is taught with strict regard to tonal relations and to largeness of sight, the pupils are led to see how easy it would be to pass on to the painting of them in full strength of colour.

So far, too, all has been done by collective teaching, which, indeed, is absolutely necessary with large mixed classes; but I must point out that it has the great drawback of causing boys to rely too much on the Master, who may easily come to do all the thinking for them. Every possible device should be used to see that no one is following mechanically.

As soon as we have taught each boy to see an object properly for himself, and to set about the drawing of it in an intelligent manner, the need for collective teaching has gone. When this stage is reached we have caught up the Schools of Art, and may, with small classes, set each pupil to separate specially chosen work, or a whole large class may draw from one model, even when it is very irregular and presents great differences of appearance to each boy.

If pupils could be classified according to drawing ability, this stage would quickly be reached by the best boys, who would soon be in the higher classes and able to do the work they are individually best fitted for, while the duller boys would neither be hurried, overtaken, nor discouraged.

But efforts in this direction are checked by the fact that at the Public School this advantage could not be maintained, as the same classification according to other than drawing capacity prevails and is little likely or be changed.

EXTRA DRAWING CLASSES—PEN DRAWING—WASH DRAWING—
PICTURES VERSUS MODELS — DRAWING FROM CASTS—
DESIGNING.

The best thing that can be done under these circumstances is to allow extra time for drawing to boys with special aptitude.

Extra drawing teaching is absolutely necessary to prepare boys for the kind of drawing required to pass the Navy Examination. These need special instruction in pen drawing from good examples, and this may well be combined with black and white wash work, to form an easy passage to sketching from nature. The Classes for extra drawing at Greenbank School, Liverpool, have been remarkably successful, not only in rapidly bringing boys on, but also in arousing interest in drawing throughout the school—the ambition to do well enough to be qualified to join them being very general. Pen drawing is very popular, its special artistic qualities, the crispness, the sparkle, the effectiveness of contrasted tones, of vigorous blacks, and whites made brilliant by silvery half-tones, being quickly appreciated. I have been surprised to find how many boys are inclined to very fine delicate and elaborate work. I have a good collection of copies, many of them original, and the others selected to show as much variety of good method as possible. I require beginners in pen work to do special bits of practising to enable them to get the precise depth of different tones by means of straight lines, uncrossed, of varying thickness and closeness of line, and find this an excellent and unsuspected way of getting boys to practise the otherwise uninteresting drawing of straight lines.

Black and white wash work drawings are also great favourites. These are for the most part pocket-book sketches in pencil reinforced with washes—a quick, handy, and effective means of sketching from nature.

There is no doubt that boys with the slightest artistic inclination take greater interest in this drawing from little black and white pictures than in working from models, probably because it seems so much nearer to Art, and also because its results are better appreciated at home. But though I am gratified with the success of this part of my teaching, I am convinced that it should be secondary to the model drawing. A boy may copy a picture with delicate accuracy who could not make a fairly correct drawing of a haystack, or the open door of a room or the top of a table. The drawing from common objects, properly taught, is a much more thorough training in the art of seeing. At the same time it must be remembered that a boy may excel in drawing cubes and models whose more distinctly artistic faculties—his appreciation and capacity for pictorial or decorative design—remain almost wholly uneducated. It is, therefore, very desirable that both kinds of work should be taught in schools—and the satisfactory copying of even very simple pen drawings and black and white pictures cannot be taught in large mixed classes.

Classes for extra drawing, however, should be used also for the teaching of drawing from casts and from flowers and plants and other models too difficult (because of their varying aspects) for a large class. I have found the younger boys in a preparatory school do not take at all kindly to working from casts. The large yet searching manner of seeing necessary for their proper copying seems to entail a greater mental effort on young boys

than they can give, with so little stimulus as the unnatural dirty-white objects provide. Of the great value of such work, however, there is no room for doubt. The casts may either be from nature or from the antique. They should not be so large as to overtax a boy, and I think of small casts those from small natural objects are the best.

At Greenbank School we have tried to encourage the designing faculty. From my experience, I should say inventive designing capacity is more common among young girls than young boys, for though inducements have been held out to get original designs for initial letters, monograms, and bookplates, the results, with few exceptions, have been unsatisfactory.

I regard it as very important for the teacher to watch keenly for any little sign of merit, and especially to recognise the good qualities underlying some defects. Praising is the pleasantest and, perhaps, the most profitable part of the lesson, but the pointing out of faults is a duty which must never be shirked. Boys have, for the most part, a very keen sense of justice, and appreciate strictly fair dealings, even when unpleasant for them.

MARKS FOR DRAWING.

In this connection I must say a word on the subject of marks. Though the teacher can ill-spare any of the short time from the teaching to award marks for drawing, I think marks should be given, and they have, of course, a greatly increased value if they count in the general work. Clever boys who do not care for drawing would then find it necessary to give more than a perfunctory attention to it, and many others would apply themselves more earnestly for the sake of the small but tangible reward. The boys who draw well (who I am told sometimes do nothing else well) would feel themselves less a set apart, if their marks for drawing improved their position in the school. It is very undesirable that drawing should be considered an outside matter.

JAMES T. WATTS.

ART TEACHING IN PREPARATORY SCHOOLS.

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ART TEACHING IN PREPARATORY SCHOOLS.

Though it is of the utmost importance that boys when young should be rightly grounded in the elements of Art, no branch of education in Preparatory Schools stands in greater need of systematic organisation and encouragement.

Most minds are to-day convinced of the beneficial effect which the training of eye and hand has upon the mental development of children, and that it is a positive duty to cultivate the powers of observation and invention, and to give the young a fair chance of expressing their delight in God's works, and their own natures in Art.

The very excellent Art training which is now being given to the children in many of our Public Elementary Schools, notably in the great towns—Birmingham and London for example—evidences the interest with which the Government views the subject. What is being done in Birmingham especially is most remarkable. Great simplicity, great beauty and thoroughness characterise the teaching of Art in the schools of that city. The London School Board is also doing wonderfully good work, but their design is not so simple, and the work is less clean and direct than that done in some other of our large towns. But, taking it all round, the School Board work throughout the country is very good, evincing energy and conscientiousness on the part of the teachers, and a splendid response from the pupils.

I have been deeply interested, and to some extent humiliated, as an Art Teacher in Preparatory Schools and in a Great Public School, by the altogether wonderful results which art-work in our Public Elementary Schools has already produced.

I say humiliated, because the pupils who have achieved such triumphs do not come as a rule, from cultured homes, where æsthetic surroundings exist, calculated to refine and cultivate artistic sense, but very often from environments where beauty, order, and external refinement, all three necessary to true art, are exceedingly rare or entirely unknown.

The principal cause of this success in our Public Elementary Schools is the enlightened character of the teaching which recognises that children desire something in work which is entirely enjoyable and beautiful, a wise admixture of play with work, the two going happily together hand in hand. The wisdom which has secured lovely and interesting specimens of plants, flowers, and things of horticultural interest from our public parks, and sets the city children, delighted babies of six and seven years of age, to the happy task of expressing their enjoyment of nature through the media of brushes and bright colours, cannot be too highly commended, as it is altogether right and appreciative of child nature. I hope that large numbers of teachers of all subjects saw this work in the English Education Exhibition last January. Since those who

have done so cannot have failed to receive delight and inspiration from it, for it proves how responsive even babies are when encouraged to express their feeling about anything of beauty, their infant efforts mean much more than mere imitation, they imply happiness in the worker, and a love of the thing done, dignifying the work and begetting reverence, they show that the young eyes are opening to the beauty of the world, and they afford a sinless recreation for lives surrounded by ugliness and temptation; but, above all, they create refinement of mind and character.

Now, if this and much more can be and is being done under many adverse conditions amongst the uncultured classes, much more might be accomplished by right organisation and effective instruction amongst the more cultured classes who are found in Preparatory Schools. The instincts of children are much the same whatever their external conditions, and if their teachers possess patience, insight, and sympathy, they can easily interest children in the elements of art. But however well grounded a teacher may be in his subject, lacking these three virtues he will never evoke much response from children.

It is the purpose of this article to suggest, for the consideration of Preparatory School masters, some simple and systematic course of instruction in Art adapted to the conditions and limitations which exist in Preparatory Schools.

The Art-teaching of to-day in Europe, America, and even in England, is a very different and much more important factor in education than it has been since the days of the Renaissance. People are protesting against external ugliness in their surroundings. Towns are again growing beautiful. Parks are laid out with lovely arrangements of form and colour by true floral artists. The handicrafts are everywhere, in the palace and the cottage. Painting and sculpture no longer arrogate to themselves the whole of the kingdom of Art. Design, which underlies all really great Art, is re-asserting its supremacy, and pictorial illustration teems with brilliant originality. The many marvellous processes of artistic reproduction give a beauty and variety to illustration beyond anything the world has ever seen, and through their agency Art permeates civilised life. Now-a-days the term Art-teaching covers a wide field. Teachers are more capable, and begin to realise that the power of doing a thing does not necessarily imply the gift of imparting that power to others, and, what is still more important and significant, students of all ages and classes are producing better results, and show in their work more freedom of thought and greater individualism.

Art-teaching to-day means more than training the eye to perceive, and the hand to delineate form and colour. Primarily it means the educing from, or leading out of, the pupil his special and individual power of expressing his own feeling about Nature, not merely the mechanical power of portraying the facts falling on the retina, but suggesting the emotions which those facts create in his soul.

We teachers of the young should be specially glad of our calling, because it is our good fortune to have, as it were, new unspoiled, untrained, impressionable minds in their most receptive period of growth, to deal with, it should, I say, be a joy to us, but balanced by the sense of heavy responsibility, for plastic matter can be easily shaped to beauty or ugliness, and the hardening of time fixes its form for ever.

Personally I believe that the most important part of our work is the sympathetic study of our pupils' minds, in order that we may bring out from them that which is peculiar to themselves, and impart to them that sense of delight which accompanies the expression of their own individuality.

This may seem at first sight to be no easy task, and I admit there are many difficulties. For instance, in class-teaching, when in three-quarters of an hour a lesson has to be given to twenty or thirty boys of different ages and ability, the minority perhaps tolerant of work, the majority intent on evasion or play, nothing but the power of attracting and interesting them on the part of the teacher can avail, and here comes in the absolute need of a wise and effective method of teaching, which in its initial stages is nearly all play and which throughout its whole course never quite loses this delightful characteristic. A teacher must take for granted that all young creatures, higher in the scale of being than earth-worms, love play, and only an abnormal adult-infant can do without it.

I have seen many a good lesson wasted, and many a responsive pupil spoilt for the time, by the worrying iteration all through the lesson of such reminders as this, "Jones hold your head up; Briggs, turn your toes out, and don't sniff; Smith, keep your fingers still, and don't make such silly grimaces." Very excellent and moral training in its way, necessary in a gymnasium or a drawing-room, but very disturbing and irritating to boys who are trying to follow vulgar fractions or who are absorbed in the prowess of Warwick the Kingmaker, still more so to those who are fascinated by some seductive demonstration of form and colour, which by its spell has raised them for the moment above the consideration of what their young unruly limbs are doing. To establish a feeling of reasonable human sympathy between one's self and one's pupils is the first step towards obtaining good results. I have heard boys say, "We can learn from old so-and-so, he's more like a friend than a master."

I am convinced that all normal and natural children possess undeveloped powers and possibilities, and not least amongst them is the power of appreciating beauty, and the delight in producing it. These may be latent germs, but they must be developed, and the question is, how? For they may quite easily be nipped and killed by want of insight, patience, or power on the part of the teacher. Hitherto we have been prone to try and impose upon the child's mind our own adult ideas and standards, thereby producing mental indigestion and discouragement. We are apt to be too serious, and eliminate from our teaching the saving salt of play, rendering it tasteless to the youthful palate. Moreover this craving for

happiness in work is instinctive and natural, and Art, above all other subjects, satisfies it. We realise this in the radiant chubby faces at a Kindergarten and the pretty interesting work resulting. Very often we teachers have been trained and partially throttled by some set system of teaching formulated by adult minds for rather indiscriminate application to all conditions and to all ages, and we are surprised to find such a small minority of our young pupils respond to it. It is as though we shook sweets from a canister into a box without first measuring the holding capacity of the latter, and yet our system wins prizes and gains standards, and is ticketed as complete by high authorities. But the higher the estimate of our own system, the deeper our despair in finding that even with its aid we cannot mould our pupils into miniature adults. It is a hopeless combination, and had best not be attempted. The beginning and the end of the matter is that we don't know the child mind, and until we do, we cannot develop it.

What then are its characteristics? Are they not awakening wonder, curiosity, love of fine things, delight both in construction and destruction, the desire to understand how things are made and how they work, inspired through all with a perfect passion for play, all very excellent indications to the teacher? If only clever children could teach children it would be an ideal state, for we elders lose our sense of the value of play, and only those who retain their child nature are ideal teachers of children. Think how new, fresh, and wonderful the world is to child's eyes, and how easy it is to interest his mind if the teacher will descend from the rostrum and first learn how things appear from the child's stand-point, instead of vainly trying to lug the little one up to his level by main force and make him gaze out on a world distorted and incomprehensible. The views, conceptions, standards, and tastes of an adult are simple silliness to a natural child. Compel him to see through your eyes, and, hey, presto! all the joy, fun, and wonder have vanished, and the effect of your world upon him will certainly not result in Art.

These introductory remarks are not, I trust, irrelevant to the immediate subject of Art Teaching in Preparatory Schools, because boys come to them when quite young and at a very impressionable age, long before the romance and marvel of childhood has "faded into the light of common day," and I feel the necessity for making them, in order that the ground may be cleared for the building up of the more practical portion of this essay.

As often as not, those who have to teach drawing or any branch of Art in Preparatory Schools are quite untrained in the subject, their primary business being general education, which heretofore has not included Art. For drawing at the beginning of the century was styled an "accomplishment"; now, in high-class schools, it is an "extra," but in our Public Elementary Schools and in the Continental schools of all grades it is regarded as "absolutely essential"—one of the pegs whereon the teaching of all other subjects depends. It is to these teachers that I principally

address myself, knowing many of them personally and finding them all earnest in desiring enlightenment, and, moreover, convinced of the great importance of drawing, both for themselves and their pupils, because of its power in illuminating all other school subjects. They realise that intelligible demonstration on the black-board saves much time and talking, and imparts clearness to their explanation.

Take, for instance, the teaching of modern languages as in Germany or France, where explanatory sketches are employed in indicating objects or illustrating incidents relating to the words or phrases which the class is learning. In Geography, again, a few lines will describe a peninsula, a bay, a ravine, or will differentiate a volcano from any other kind of mountain, besides describing briefly all sorts of products coming from different countries. In History, Classics, Science, Mathematics, and in every department of Natural History, teaching is made easier and more interesting by drawing; it focuses thought and incident through the appreciation of form, doubling the strength of the impression on the pupil's mind. And it is wisely ordered that all teachers in our Public Elementary Schools must hold certain certificates for drawing before they can teach any subject.

I am fully aware that such conditions do not as yet exist throughout our Preparatory Schools, and that the Art teachers in them require help and advice. I shall endeavour in this essay to indicate lines upon which they might proceed, in order to make the best of existing circumstances.

It is not impossible for all intelligent people to so far train their eyes and hands, that they can, after a few efforts, succeed in copying a simple drawing so as to be able to differentiate "a hawke from a handsaw," a camel from a whale, a sheep from a dog, a helmet from a tophat, etc., etc., and I advise all those who wish to learn enough themselves to enable them to overlook and guide the young, to practice copying forms, in outline only, from such objects as birds, fish, shells, flowers, insects, simple animal forms and easy architectural details, or in fact, anything else that may interest them. This can be done sometimes from nature, and when that is inconvenient, from books, and now-a-days many well illustrated technical books are available at moderate prices. And here I wish to suggest that all Art-teachers should gradually collect together, for help and reference, a small set of such books, works upon Design, Ornament, Handicrafts, Botanical Illustrations, Pen and Ink work, Architecture, and Natural History. For it is foolish to imagine that any teacher can carry in his head the innumerable facts and processes the knowledge of which is needful or at any rate helpful in teaching Art. And here let me say, the only way in which a teacher can succeed in giving a clear, interesting, and fully instructive lesson, is by previous careful preparation, so that from beginning to end every word to be spoken and every line to be drawn is mirrored in his mind, as well as all reasonable questions upon it anticipated.

The Art-teaching in schools for young children should be throughout based on *demonstration*, and demonstration should

be made very simple, and upon a large scale, eliminating the small and unessential feature of the object portrayed, leaving out, for instance, a fish's scales, a bird's smaller feathers, or the seemingly accidental irregularities in plants or shells, employing only the large, simple, constructive, and characteristic lines. This kind of demonstration should be prepared beforehand, and drawn afterwards before the class.

It is well, indeed it is necessary, that objects to be drawn should also be explained verbally, and that the names of parts and elements of construction should be given. The pupils should be told to print or write carefully these facts opposite or about their drawing. This adds considerably to their interest in the lesson. In drawing a fish, for instance, attention should first be called to its general form, then its proportions, that it is either short and broad or long and narrow, the relative width to length, large or small in the head, the names and positions of its fins, the character of the mouth, etc., etc., and also any interesting facts about its habits and haunts should be mentioned. Or again, in drawing a chair, table, or bracket describe their construction, naming the tools used in forming their different parts, and the kind of joints employed in their fitting together, with the reasons for using them, where and why screws are used rather than nails, and so on, until the class understands the thing thoroughly. All this takes little time if prepared beforehand, and may be told to or elicited from the pupils whilst they are watching the demonstrations or the object itself. And here it may occur to my readers that lessons of this sort require time. They certainly do, and what good lessons do not? But the saving of time in the actual teaching is very great if the teacher has mastered the lesson beforehand. Whilst on the subject of time, I think the minimum allowance of two hours and a-half per week is just enough to afford fair results, and should not be grudged to a subject so beneficial in its effects on all other school subjects.

I find from my own experience that the time allowed by most schools for the study of Art is quite inadequate, seldom exceeding two hours a week, and very often the inside of one hour and a-half. Here, again, the Board School sets a good example, in allowing from two to five hours a week for this branch of education. The difficulty of finding time might be met by encouraging boys to give voluntary hours to a subject which is more a recreation than a labour.

We will suppose that, as is usually the case, the time allowed cannot be extended beyond two hours. Most boys and many masters will be glad to give one hour upon two evenings in the week for voluntary work, especially if the fascinating use of the brush and colours is allowed, for the element of play in work takes the sting out of it, and converts a task into a treat.

I have used the term Art-teaching very frequently in this essay, rather than the teaching of drawing, and I have done so advisedly, because drawing is only one of the outward expressions of Art, and in itself is purely mechanical, unless used as a vehicle for conveying Art ideas, for the mere imitation of objects never

has been and never will be Art. Imagination, invention, and feeling are the powers which underlie all true Art: these we should endeavour to elude from the pupil through the mechanical powers of eye and hand, sight and touch.

Briefly to explain my meaning, it is better to draw a beautiful line than a scientifically accurate one; it is more important to dispose lines and masses with beauty of feeling than that we should arrange them mathematically. Again, a freely drawn spontaneous line made by swinging the whole arm and hand rather than using the fingers and wrist only is more vital and expressive than a careful and painstaking line hesitatingly drawn, with much labour and many rubbings out, which, when finished, represents dead accuracy, without character or feeling, and which has given no pleasure in the doing. It is of little use being able to copy the Parthenon Frieze if the appreciation of its rhythmic arrangement and continuity of curve is not understood. A few spots rightly arranged in relation to each other can express the same laws of Art applied to simple elements, as this the greatest of processionary friezes exhibits. The abstract arrangement of lines and spaces made pleasant to the eye is the acknowledged basis of all graphic Arts, the very foundation of design, which is itself the chief element of beauty in all really great Art.

Now design, or the right disposition of lines and spaces, can be taught very simply in an elementary way, and to this end many books have been written, which are good and helpful, in so far as they send their readers to Nature with more understanding and open eyes. And the main reason why design should be taught to the very youngest of children is because from the very beginning it is charming. It awakens fancy and invention, and inspires imagination, at the same time affording the means for training eye and hand. For children receive much more pleasure from inventing, or what they call "making up," than from the more laborious process of copying, which demands from them too much restraint. Moreover, very few children are capable of copying at all accurately, as they have no joy in it. The very simplest copies are the best, but they must be interesting and must not require of the child too much application. There is no romance or play in copying, but in arranging and inventing there is an infinity of delight.

So in all my Preparatory School work, I make design the basis of my teaching; it inevitably leads on to the study of form, and embraces all that is beautiful in both Nature and Art.

A charming series of blackboard lessons may be given, explaining the laws which underlie Design.

Lesson 1 might shew the beauty and value of the law of Repetition, by repeating at fixed intervals any simple shape, the oval, for instance, which is the elementary form of the vegetable and animal kingdoms.

Lesson 2 might introduce the laws of Variation and Alternation, by placing between the ovals at set distances (of course using only eye measurement) any other simple form placed horizontally, if the ovals are upright, or *vice versa*. But it is not

necessary for me to enter into detail, as any of the recent good books on the subject will tell the teacher all he needs to know.* In the *Preparatory Schools Review* for March 1898, I have entered more fully into the details of lessons in Designs, so that I need not here repeat myself.

The interest to pupils in learning the art of Design will be much enhanced if the teacher can find time and opportunity to study somewhat its application to handicraft, because, although any well-conceived and rightly-ordered arrangement of lines, masses, and tints constitutes Design, yet the mere making of pattern without purpose, solely for practice, is far less interesting than designing for application which leads on to the study of the various processes whereby Design is transformed into Decoration. For instance, how to select, modify, and adapt suitable forms for metal beating, where the conditions of a partially expansive resistant material, and particular tools capable of working in definite ways, set limitations to the designer's fancy. It is quite evident that in using certain materials and tools the handicraftsman must modify his design before it is appropriate to its new conditions. The sort of design which works out well with the needle in a soft, woven fabric will not work out equally well with chisel cuts or hammer beats in hard material. Hence we obtain what is commonly called, "Convention of natural forms."

Now, the principles which work this change from pattern *per se* into decoration can be quite easily learned from certain standard books, and if the teacher to whom they are new will make, and keep, notes from them through the first few terms of teaching, they will be handy for future use, when new pupils go over the same ground with him. Of course it is, after all, more important to teach children design than to lay too much stress upon its application, but if in the workshop they are modelling, carving, or beating metal, as they would like to do, then the application of design is very essential.

It goes without saying that if all, or even most, boys had passed through a really enlightened course of Kindergarten teaching before coming to Preparatory Schools, it would not be necessary to insist upon the importance of awakening their interest in Art work, as that would have been done already, but the majority have not had this advantage, and consequently are ignorant of the power latent within them ready for unfolding, to their great benefit and lasting delight.

But, to be as practical as possible, I will state what is in my opinion a good course of work for Preparatory Schools, calculated to bring boys up to a fair state of efficiency, enabling them to benefit by the advanced teaching which is given in some few of our great Public Schools, where the teaching of Art is becoming

* I should have wished to give a list of such books at the end of this article, but the conditions of its publication render that impossible. If however any teacher desires to possess information on the subject, I shall be happy to supply it. That the right books should be obtained is, to my mind, a matter of importance.

a recognised factor in education, and is being conducted upon more or less enlightened lines, but where unfortunately too little time is given to the subject.

The course which I suggest will be found both varied and practical, and is as follows:—(1) Line drawing, (2) design, (3) freehand from objects, (4) brushwork, (5) memory drawing, (6) elementary shading, (7) relief drawing, (8) lessons in proportion, (9) free arm work on the blackboard. These branches of the subject I now proceed to explain.

(1) Line drawing on large paper or blackboard with brush, chalk, or charcoal. These large lines should be drawn with a free swing of the whole arm right from the shoulder, the pupil standing or sitting at arm's length from the board.

Line drawing on smaller scale in pencil, which should be held rather upright, the hand moving freely over the surface of the paper. The entire line must be drawn at once, without stopping or patching, and if not a good line it must be rubbed out, and the whole of it re-drawn. All young students should draw large. Small work cramps the hand and looks weak and timid. No very small drawing should be allowed at first until spontaneity is attained, and children should not be worried into making very neat, regular, wiry lines without energy or character, by rubbing and patching. This is the chief fault to be found with machine-drawn copies for freehand work; the very nature of the copy makes freedom impossible.

(2) The bases of design should be taught; very simple forms should be used, and something should be shown the pupils of the ornamental treatment of natural objects.

(3) Freehand drawing from easy objects should be taught with simple explanations of their perspective. Avoid the use of ruler and compass, which are not needed until later, when the science of perspective is taught. But this will never be a fitting subject for Preparatory Schools, for as far as the elements of Art are concerned the study of perspective is useless. It falsifies and distorts form, as the human eye sees it. It is too dull and difficult for young minds to grasp. It may eventually be useful to the architect, but it is of no value in the training of young eyes. If children are made to notice that receding lines appear to converge towards a point on a line on the eye-level, and that lines below the eye appear to run *up* to the horizon whilst those above run *down*, they will soon grasp the principles sufficiently to understand what they see and reproduce it intelligently. But here arises the question, How to give a lesson in model drawing to a class who all see the object from different points of view? This I know, from long experience, cannot be done satisfactorily in a limited time, and so the best solution of the difficulty is as follows:—The teacher should begin by explaining its general form, calling attention to its proportions, construction, and the direction of its main lines. Then, after he has satisfied himself that the class has grasped these essentials, he must draw it large on the blackboard in one or more positions, letting the pupils follow him line by line, drawing as he draws. He should

then walk round the class to see if the proportion and general features have been realised rightly, after which he will proceed with his demonstration, putting in such simple details as will not complicate or confuse the general effect. In a small class the model may be so placed that each boy can draw it from his own point of view. If time permits the teacher should go round making marginal demonstrations on the pupils' books. This is a happy compromise between individual and class teaching, but involves the teacher in a great amount of labour, and means more time.

(4) A very delightful series of lessons may be given in brushwork, the teacher demonstrating on large paper fixed to a sloping board. The ease and freedom of the brush and the fascinating medium of colour never fail in evoking happy response from the pupils. Elementary brushwork may be divided into three divisions, first that which gives the natural marks or touches of the tool itself, ovoid blobs of varying proportions suggesting leafage and affording scope for invention in their arrangement. Second, by lines, straight and curved wide and narrow, drawn in all directions, their width or breadth being regulated by the amount of pressure employed. These two divisions in conjunction make most beautiful forms. The third division consists of flat tinting over spaces whereby pattern is emphasised and the relative character of colour demonstrated. All this is very easy work, pleasurable to pupils and teachers alike.

(5) Perhaps the most important subject of all is memory drawing, which is too often neglected. If children can memorise forms (and they all can) they possess a substratum of fact for invention to work upon, they gain power of perception, for nothing can be committed to memory without keen intelligent observation. In this, of course, the teacher must largely direct them but the task is slight, as young minds are both impressionable and receptive, and as easily grasp and retain essentials as the adult minds, which, knowing more, often see too much. To teach memory drawing well, the teacher must first thoroughly instruct himself in the facts which he wishes the class to memorise. He will then begin the lesson by explaining the object, as in model drawing, pointing out its characteristics, proportion, general form and construction, allowing the class to look at it whilst it is being explained. Then putting it out of sight, he should ask questions upon it, correcting wrong answers. When that is done, the class should have five minutes for transferring what they remember of it to their paper. Some pupils will remember more, others less, but if the object is again exposed for one minute, and five more minutes are given for completing and correcting, it will be found that the majority have remembered all the main points, and whilst their minds are intent on memory they often draw surprisingly good lines, because they are not thinking too much about them, for poor feeble lines often result from nervous anxiety. It is well at the beginning of each lesson to let the pupils repeat from memory the object they learnt and drew at the previous lesson; this generally takes five or ten minutes.

(6.) By elementary pencil shading I mean the careful covering of spaces with broad, even and parallel lines. These exercises can be made very interesting if the spaces are of beautiful form and gracefully disposed in relation to the unshaded parts, and this disposition of light and dark shapes or spaces is a very important element in Art, and differentiates a decorative picture from an undecorative one, a vulgar street-poster from a refined Turner.

(7.) By way of change, and as a promise of good things to come, more advanced pupils might do a certain amount of relief drawing, which is a development of the above-mentioned disposition of light and dark, introducing the new elements of roundness and solidity by gradation and cast shadow. But this work should be kept as simple as possible by ignoring reflected light and leaving out subtle gradations, but using only pure light, half tone, shade, and cast-shadow. If executed in chalk, pencil, or stump, all the shading should be in lines even and parallel sloping downwards from right to left. I only advise this relief drawing in the case of advanced boys who possess the desire to imitate something.

(8) Proportion is so important, most children being weak in the sense, that it is well if the teacher gives an occasional lesson in which this quality only is insisted on, placing before the class some simple objects and contrasting their relative proportions, comparing their heights, lengths, and bulk, and the dimension of part to part. The same may be done by comparing line with line, or space with space on the blackboard, and in marking these exercises the teacher must be careful to mark for proportion only, not allowing neatness or beauty of line to win high marks, as the object of the lesson is proportion.

(9) Practice on the large blackboard is much enjoyed by children and is excellent for them in every way. The arm should swing freely and all the drawings should be large. This produces pluck in drawing and gives great freedom. It is well, moreover, to encourage the use of both hands, for several obvious reasons. Firstly, because the use of the left hand is said to strengthen the right lobe of the brain, and at any time it serves as a substitute to an injured right hand. Secondly, because children enjoy the sense of power it gives, and can cover a large surface without shifting their position. And, thirdly, it is a great convenience in drawing symmetrical objects, for both sides can be drawn at once. Large drawing on the blackboard is especially useful, as in doing it the arm registers the right action automatically, and enables children to produce at will very free and accurate forms.

Now, the course I have suggested includes nine varieties of lessons, but for junior classes it will be well to take only four or five of them, according to the inclination of the teacher.

Space only permits me to make suggestions upon the sort of work which should be attempted, and much, very much, must always depend upon the teacher's power of initiation.

As to what is being done at this present time in Preparatory Schools in England, I am only partially qualified to speak, but those schools which have come under my notice are all making

strenuous efforts to place their Art classes on a fair footing. I know of one school in particular which is responding splendidly to the modern idea that Art is an integral part of education, for its headmaster has built a very perfect Art studio, beautifully appointed, with everything needful for carrying out a system of thorough Art-training, and down to the smallest details of furniture and fittings has given his Art teacher and his pupils every possible chance. They, on their part, are making good response, and already have turned out excellent work.

Where masters are in earnest about the subject of Art, but do not feel themselves fully qualified to teach it thoroughly, they might do well to consult occasionally with a teacher of experience, who, if he visited their school even once a term, would be able by suggestions and criticisms to keep them working on sound lines. For until recently the idea of teaching anything more than pencil drawing from flat copies or objects does not seem to have occurred to many Preparatory School masters. If they do not want to remain miles behind the Public Elementary Schools in this matter they must begin to organise a rational system in this branch of education, for the interest which the ratepayer receives on the money he invests in Public Elementary School Art Teaching is out of all proportion greater than that which the parent of an average Preparatory schoolboy receives. In saying this I blame no one, as, owing to the great pressure on the time-table, Preparatory Schools are handicapped; but, still, that it is so remains a melancholy fact.

I do not know whether in most Preparatory Schools it is customary to give marks for drawing, but where they are given for other subjects they should not be withheld from this, as boys are greatly encouraged by finding that their patience and industry, or even their talent in drawing, affects their places in form; and why should it not do so equally with all other gifts or virtues they possess?

I wish to warn teachers not to mar their work by laying undue stress upon producing a showy series of drawings for the boy to take home in order to please parents. My experience of parents leads me to think that they would rather their boys gain power by constant practice than produce for their edification a smart piece of work showing more labour than learning. For when boys are doing blackboard work, it cannot appear at the end of the term, as it is cleaned off after every lesson, although the very last lesson of the term might be left on the blackboard for exhibition. Again, "memory drawing" does not make so fine a show as copies done from objects, but it means the acquisition of power on the part of the pupil, and the lessons on proportion show very poor artistic results, but are invaluable. Also those exercises which are merely for gaining hand power are extremely imperfect art, but so also are scales on the piano. It is fatal to think first of all of making a show, but it is well that all work, good, bad, and indifferent, should be seen collectively at the term's end, or twice in the year, by both boys and parents. I strongly advise teachers to keep their own hands off the boys' work, and to rely

solely upon demonstration, for if the drawing is "touched up" good pupils are discouraged, and idle ones are induced to leave all the hard bits for the teacher to do. The system of working over the pupils' drawing creates dishonesty, for some cannot confess, under the eyes of an admiring mother, that the part she praises most is the master's work. If a teacher has to impose his corrections upon his pupil's work it shows one of two things, either that the subject is too difficult or that the pupil is indifferent to it.

There are exceptions to all rules, and occasionally a master is justified in helping a very keen and patient worker over some unforeseen difficulty, instead of allowing him to suffer great discouragement, but in this case the correction should be notified in ink, and signed by the teacher.

There is one very important subject which I hope may commend itself to the notice of headmasters, and that is the inevitable association of the Art classes with the workshop. They naturally play into and strengthen one another's hands, for nothing can be done really well in carpentry, carving, metal work, or modelling that is devoid of Art, such as beauty of proportion, grace of line, or fineness of form. Moreover, all handicraft demands some sort of decoration which cannot exist apart from Art.

I recommend, therefore, that all boys in the workshop should also belong to the Art classes, for the sense of touch there employed is the finest faculty for learning and appreciating form. On the other hand it would be well if all who are learning to draw would also do some modelling in wax, plastocine, or clay, as the manipulation of these substances teaches form by feeling. Very simple studies of shells, birds, fishes, fruits, and flowers can quite easily be modelled by quite young children under proper instruction, and any teacher may learn the elements of modelling or carving from manuals, at very little cost of time and money.

Working out simple designs in beaten copper might be done in the workshops, the pupils having previously made their designs in class. Inexpensive handbooks can be procured on this and all other handicrafts.

In offering these suggestions I am not addressing myself to those teachers who feel themselves to be efficient and "up to date," for they need no advice or interference, but I know there are many amongst Preparatory School masters who will welcome advice as gladly as I myself did when first beginning to teach.

I know of some schools where the freedom of the teacher is much restricted by outside control, and by no means to the advantage of the schools in question, and I should suggest to all headmasters and headmistresses that they would do better if they placed implicit trust in their own staff, so long as the pupils are happy and the results good in comparison with other schools, for it would be very irritating to a classical or mathematical master to have his course laid down and controlled by someone outside the school in which he taught.

Before concluding I want to say a few words about the way in which specially gifted pupils should be treated. Taking for granted that the end and aim of education is the development of mind and character, which in these days of cramming for examinations might well be doubted by the sceptic, I think it is incumbent upon head-masters to recognise their responsibility towards those of their pupils who possess a special gift, whether for Art or any other subject, and to allow extra time for its development, even to the exclusion of some subject of secondary importance to that particular pupil. I have often known cases in which clever men deplored the fact that when at school no facility was afforded them of cultivating their really greatest power. It was overlooked, or the time-table, like the laws of the Medes and Persians, could not be altered, and the result was that the days when their minds were most impressionable, were lost for ever, and in spite of after exertions were never really recovered.

It surely is reasonable to plead for more time to be given for the cultivation of special gifts, not only for the happiness of the individual but for the good of the community. And if this special gift is for Art, why should it not have equal chances with classics or mathematics? I tremble whilst writing such audacious words, and see rising round me the angry ghosts of potent, grave, and reverend scholars shaking dusty tomes threateningly, but I murmur an apology and defence, "more things are wrought by Art than yonder wan scholars wot of." Once let a boy or girl find his or her true *métier*, and they begin to live in all their fulness, developing in all directions, but missing it, or being misdirected to things of secondary interest, they move slowly if not sullenly in a state of suppressed rebellion, achieving little more than disappointment, whereas in following its own individual bent a young nature opens out happily and soon perceives the correlation of other subjects to its own beloved one, and can be led from that as the focus, to the others as the fringe. I am happy to think that at some schools extra hours are now allowed for boys of unusual ability.

Even when a boy possesses some deep enthusiasm, it is often cherished secretly, whether it be for Art or any other subject. A certain shyness and wonder often accompany the possession of great gifts, the child himself not comprehending why he feels himself different to others, and often through a sort of *gaucherie* he withholds his confidence from his teacher, until by intuition, tact, or sympathy the teacher finds him out. Then under wise guidance the boy is transformed! He has found himself, and he will do any mortal thing for that teacher. I have known boys who meekly resigned themselves to draw flowers, birds, and butterflies, or even cubes and pyramids because the teacher told them to do so, when all the time the unuttered longing of their souls was to draw steam engines or ironclads. First, therefore, find the boy's great enthusiasm, then notice what medium he prefers working in, pencil, pen, paint or plaster, and you can then lead him willingly, or he may even outrun you along the lines of

his liking. Boys who want to paint birds will spend equal pains over the study of twig and leaf as a setting to their beloved object.

Pupils possessing extraordinary talent or real enthusiasm must be allowed to use material unstintingly out of school hours, and should be encouraged to express their own feelings and ideas unrestrainedly, they thereby show the teacher their strength and weakness, their own individuality, for boy differeth from boy as star from star, and strong individuality demands special treatment. A clever child may, in drawing a horse, indicate its action splendidly as being that which strikes him most, but his sense of proportion or his perception of form may be weak, he may draw it in thin wiry, confused, and scribbly lines, when it might have been suggested better and more quickly by deliberate simple ones. It is often advantageous that a boy should select his own material for working in, but he seldom knows the best method of using it; he may prefer the pen to the pencil, but its technical power is unknown to him; he will generally use it feebly, the brush sloppily, or the stumps smudgily. And here is where the teacher comes in, for from very fulness and exuberance of ideas and feelings the child will scrawl his fancies regardless of correct technique. But a wise teacher will set him to restrained measured work in which deliberate control is exercised over every line, allowing him occasionally to wanton in scribble as a safety vent. He will soon be brought to value the higher quality of the technique which well-controlled and thoughtful lines produce. For teachers, like doctors, can only promote health in their patients by true diagnosis and right remedy. Sometimes a sensitive or delicately-constituted boy will show neatness and timidity in his work which renders it invertebrate. This tendency must be met and overcome by giving him large work to do with fearless broad lines drawn at arm's length, using charcoal or big brushes. Until he regains balance by appreciating the value of force, he should be set to make quick sketches from objects in a given time, so that he may learn to jot down essentials fearlessly and without hesitation, and, when it is possible, from living and moving objects.

As regards material required, I find that ordinary school desks do perfectly well for drawing at, only care must be taken to make the boy sit up, and not too near the desk. The habit of leaning over the work is bad for the chest and eyes, for with the head close to the paper the drawing is out of focus and distorted, and the boy is apt to draw without freedom, as he only sees a part of each line at a time, instead of seeing the whole. If a rail can be fixed above the desk so that a blackboard can be leant up against it, the base lodging in the groove which contains the inkwell, it is better for the pupil than having to rest the board upon his knee and against the desk; it gives a better slope, is more level with the eyes, and makes the boy sit up.

A good large blackboard for the teacher is an absolute essential. The necessary material for the pupils should be as

follows :—A drawing book on block 14 by 10 inches, blackboard 20 by 16 or larger, a box containing four to six moist colours, an enamelled tin cup for water fixed to the side of the desk, pencils of three or four degrees, three camel's hair brushes, fine, medium, and wash size, an 18-inch boxwood ruler, for very occasional use, a small case of coloured chalks, a sponge, and a soft duster. The initial cost of these would be about 12s., and many of the articles would last for several terms if taken care of.

Where the school is in the country boys can assist in collecting objects for drawing from outdoors, and they often by doing so give the teacher a hint as to what interests them most, even live things, if properly caged and controlled, might sometimes be allowed. The School Museum should be put under requisition as a source of supply to the Art classes. This will create an interest in the Museum itself which is helpful in many ways.

Teachers should avoid dulness and lack of interest in the objects they set the class to draw. Few boys care for geometrical solids, and show their good taste in ignoring them. I cannot conceive why they should be supposed to like them, neither does an intelligent boy feel enthusiasm in drawing a school-chair for the sixth time, or the inevitable vase twenty times, especially when out of the school window he sees lovely landscape forms living and moving in the open air. It is a sure sign of dulness or, let us say overwork, on the teacher's part, when the same tedious and heartily hated models are drawn and drawn *ad nauseam*.

All school masters, whether Art teachers or others, can encourage boys to exercise their powers as draughtsmen by getting them to draw from memory and invention, or copy from books, forms and incidents relating to their particular list of subjects and bearing upon the lesson in hand.

These sketches and copies (done out of school) might receive marks, for they impress the facts and ideas which the lesson contains upon the pupils' minds and show research and industry, and however childish these efforts may be as Art, the mere fact that the boy has enjoyed doing them should suffice, although they may not merit marks.

As a last word to my fellow-teachers I would say: Do not attempt too much, keep your teaching simple and clear: it cannot be too much so for children. Avoid unnecessary detail, and accentuate essentials, do not try to demonstrate anything which is not perfectly plain to your own mind, or confusion will ensue; see that your pupils follow the first facts of a demonstration before attempting elaboration. Do not depend too much upon bought copies, but make most for yourself, you will the sooner bring your pupils into touch with your own personality. Enter with your classes into the feeling of recreation which your subject, above all others, possesses. Don't feel nervous if your demonstration is not perfect, so long as it contains some truth and feeling. Most artistic temperaments suffer from great nervousness, but this very failing produces a sensitiveness in

their work which is one of its greatest charms. Never let your pupils feel that you are depressed about your work or theirs, and don't mind if a minority of them appear critical towards your demonstrations, it is good for them, showing their keenness, it is well for you, for it stimulates to better work. Don't mistake the enthusiasm of a precocious pupil for conceit, and don't snub him into silence and indifference, and above all remember that encouragement does more than fault finding.

There is good cause for art teachers in all schools to take heart, because it is evident that Art and its great educational value are becoming more widely recognised throughout the civilised world, and the day is not far distant when it will fall into line with all other school subjects, from the Public Elementary School upwards to the Universities, and in the near future the most conservative of academics will as soon think of denying its worth, as an integral part of mental development, as they would think of disallowing the use of the right hand.

In conclusion, I wish to call attention to what is now being done on the Continent, especially in Germany, France, and Switzerland, by State aid and other means towards developing the Art instinct inherent in every child, proving that our neighbours across the Channel are well ahead of us in this branch of education, regarding it as the hand-maid of all good school teaching.

And I close my essay by a last practical suggestion—that teachers of Art in both Preparatory and great Public Schools should form themselves into an association to meet annually or half-yearly for discussion upon, and consideration of, the best practical methods for teaching Art under existing conditions and limitations both of time and opportunity. And I would add, from my own experience, that there is no subject better calculated to awaken the mind, to cultivate character, or to quicken the faculty for enjoyment in children than the altogether delightful and inspiring subject of Art.

W. EGERTON HINE.

THE SCHOOL WORKSHOP.

AN enquirer into English methods of Secondary Education might possibly expect, on turning to an article on the School Workshop, to find it treated as an integral part of the curriculum and duly correlated with other branches of study. It is therefore necessary to premise that in the curriculum imposed on the Preparatory Schools by the Head Masters of Public Schools, and in the Entrance and Scholarship examinations by which their work is tested, all training of hand and eye is absolutely ignored, and that any instruction that is given in Drawing or in the Manual Arts must be given either as a recreation or in time filched from the study of paying subjects.

The Workshop will therefore be treated here as a recreation, pure and simple, depending of course for its success, like all other recreations, on careful organisation. The chief aim must be to give thoroughly competent instruction and insist on serious work, and though a boy cannot in four or five years at a Preparatory School become a skilled carpenter, he may certainly learn enough to enable him to ride without further help a very delightful hobby, while he acquires a knowledge of construction which will be of practical value to him in after years.

So organised, work in the shop has also a definite educational value, teaching perpetually the great lesson that patience and forethought with thoroughness and accuracy in every detail are necessary to the production of any good work. Careless or hasty execution, or miscalculation of measurements brings its own swift punishment, the material is wasted and the work has to be done again.

The art of construction appeals to the creative faculty, and has a strong attraction for many boys, so strong that it will not be found necessary to make attendance compulsory,* and this no doubt contributes to the popularity of the workshop; but its attractiveness no less than its educational value depends absolutely on efficient organisation. The workshop which is handed over as a playroom to boys, in which they are left without supervision and direction, is foredoomed to failure.

ORGANISATION.

The success of a School Workshop depends less on the construction and equipment of the shop than on the prime essentials of a thoroughly competent instructor and sharp tools.

* The writer has found that in the two Winter Terms the average number of boys on the Workshop list is about $\frac{1}{6}$ of the total number of the school.

If a school is fortunate enough to have on its staff of masters a thoroughly competent amateur, it will no doubt be an ideal arrangement to place the direction of the shop in his hands, but few amateurs have carried their workshop education far enough to qualify them to act as instructors, and it is usually found necessary to employ a professional. A joiner should be selected rather than a cabinet maker. The methods of the two differ considerably in details. Speaking generally, the former works on sounder principles, and is not so apt to bestow his ingenuity on the concealment of construction. But the competence of an instructor extends far beyond his methods of work. He must be a man who can make himself respected and his shop a place of real work, and who can inspire boys with some enthusiasm and lead them on by suggestion to suitable attempts. Above all he must be able to show his pupils how to do a piece of work without doing it for them. In this as in other branches of instruction too much help is fatal to the pupil's self-reliance and so to his progress. It is not easy to find this combination of qualities in an instructor, but some shortcomings may be compensated if a member of the staff of masters interests himself in the work. I have mentioned sharpness of tools as the second great desideratum, because no good work is possible without sharp tools and because nothing is so difficult to teach to a boy as the sharpening of a plane iron; and as only the elder boys can be expected to attain any measure of success in this direction, the work has to be done for the majority by the instructor, and therefore the setting of plane irons is the necessary preliminary to every lesson in the shop. Many workshops owe their lack of success to neglect of this important condition. The workshop should never be overcrowded. Experience shows that one instructor cannot attend properly to more than from fourteen to sixteen pupils, and in the writer's opinion the class should not exceed twelve. If all are beginners, the number must be much smaller. It is advisable to distribute the beginners among the classes, as little can be done in the way of collective instruction. At the same time it is most necessary that every boy should be put through a regular course, and the following standards are suggested.

Standard I.—Straight sawing and true planing.

Work Test.—Cut out a piece of deal of given size, and plane up true and out of wind. Thickness this, using gauge, and square the ends.

Standard II.—Dovetailing.—Learn to mark out; cut one set, large size, marked by instructor.

Learn to set chisel and smoothing plane.

Work Test.—Mark and cut one set of dovetails, or make a dovetailed box.

Standard III.—Mortice and Tenon.—Drawer dovetails. Use of plough and fillister.

Work Test.—Any piece of work selected by pupil which requires knowledge of the above.

N.B.—The use of the lathe and of carving tools is restricted to those who have passed the standards.

It is not advisable to let a small boy begin work until he is tall enough and strong enough to hold down a jack plane. Many are anxious to begin earlier, but it is apt to result in disappointment and discouragement. It has been found useful to furnish each beginner with three chisels and a smoothing plane which he is encouraged to keep in good condition, and which form a nucleus of the collection of tools which almost every boy who takes to the workshop is anxious to possess. With regard to the kind of work which may be done by young boys, there is practically no limit to the variety, but it may be worth while, by way of suggestion, to set down a list of things made in a workshop of the kind during the last five years.

In Deal.

Tool Boxes.	Stand for Hens' Eggs.
Play Boxes.	Beehives.
Egg-collecting Boxes.	Rabbit Hutches.
Butterfly-collecting Boxes.	Mouse Cages.
Egg Cabinets.	Breeding Cages.
Coin Cabinets.	Bookshelves.

In Oak.

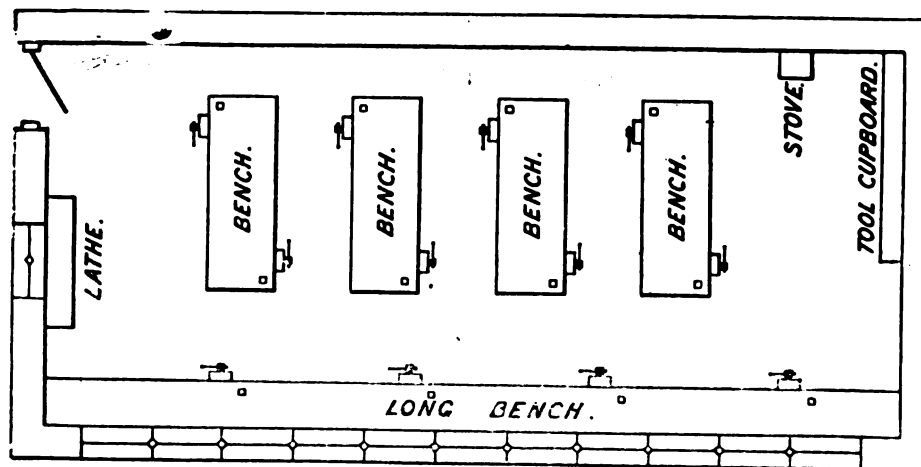
Inkstands.	Easels (small and large).
Pipe Racks.	Three Legged Stools.
Stick Racks.	Davenport.
Bookstands.	Hanging Letter Racks.
Bookshelves.	Stationery Cases.
Hanging Cupboards.	Turned Candlesticks.
Picture Frames (many shapes and sizes).	Kneehole Writing Table.
Brackets (many shapes and sizes).	Dumb Waiters.
Revolving Bookcases (miniature.)	Trays.
	Gun Case with Glass Doors.
	Violin Case.
	Occasional Tables (turned legs).

Various Woods.

Toboggans (ash).	Inlaid Chess Tables, with Turned
Inlaid Chess Boards (holly and walnut).	Legs (holly and walnut).
	Racquet Presses (mahogany).
	Foot Stools (walnut).

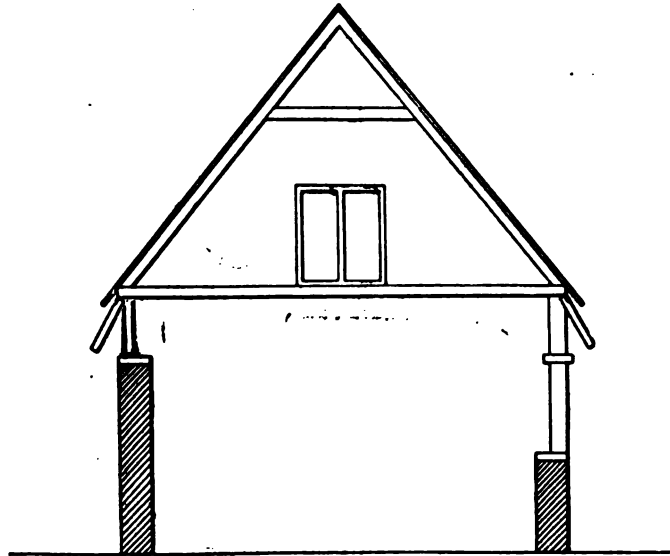
CONSTRUCTION AND EQUIPMENT.

A plan is given below for a workshop for 12-16 boys. The total dimensions inside are:—Length 36 ft., width 16 ft., and height 10 ft., to spring of roof. The benches are four in number, with a long one under the window running the whole length of the building. The shorter benches are 8 ft. long, 2 ft. 9 in. wide, and 2 ft. 6½ in. high (one for the carpenter's use is 2 ft. 8 in. high). Each is furnished with two iron vices of the "instantaneous grip" pattern, the jaws faced with hard wood. The space at one end allows for sawing-stools, stove, cupboard for tools, &c., and room is left at the other for a lathe. This is a most useful accessory to the workshop, in fact, an almost indispensable tool, but lathe work is not to be encouraged for its own sake, having little educational value in comparison with construction, and little artistic value in its more elaborate developments. The main windows of the shop should run the whole length of the building and should face towards the north for the sake of a steady light. The upper lights only are intended to open. The narrow windows on the opposite side are for the purpose of ventilation, and also run the whole length under the eaves. There should be a window at the end over the lathe, which requires a strong light. The door should be a wide one for the removal of large pieces of work. The tie beams should be stout enough to take a store of timber overhead, and a door should be made in the gable at one end to facilitate storing. It would be well to matchboard the rafters inside; this would protect the tiles, diminish dust, and add to the comfort of the building both in summer and winter.



GROUND PLAN.

Scale 1 ft. = ¼ in.



SECTION.

Scale 1 ft. = $\frac{1}{8}$ in.

It only remains to suggest a list of tools for the first equipment of the shop. These are divided into: A.—Tools for general use. B.—Tools kept in charge of the instructor.

A.—Tools for General Use.

3 Jack Planes.	16 Chisels (2 sets of 8).
3 Trying Planes.	2 Spokeshaves (large and small)
3 Smoothing Planes.	1 Rebate plane, skew mouthed, 1½ in.
2 Large Tenon Saws (14 in.).	1 Draw knife.
2 Small Dovetail Saws (10 in.).	2 Two foot rules
2 Panel Saws (22 in.).	2 Oilstones.
5 Squares (12, 6, 6, 3, 3 in.).	1 Slip for gouges.
1 Bevel.	Bradawls.
3 Hammers.	Gimlets.
3 Screwdrivers.	Punches.
2 Mallets.	Gluepot.
2 Pairs Pincers (large and small).	Oilcan.
1 Bow Saw.	Grindstone.
2 Braces.	Set of letters for marking tools
6 Marking gauge	
8 Gouges.	

B.—Tools kept in Charge of Instructor.

1 Plough.	1 Set Mortising chisels.
1 Sash fillister.	1 Set Hollows and Rounds.*
1 Set bits.	1 Set Beading Planes.*
1 Mortice gauge.	

* Not indispensable.

E. D. MANSFIELD.

MUSIC IN PREPARATORY SCHOOLS.

For the last thirty years the progress of music in English schools has been very great, and now at last in our High Grade Schools for boys it is enjoying a growing popularity. When the writer went to his Public School in 1848 (a school of 600 boys) he cannot remember a piano in the place, or a boy who thought of learning. Now there is hardly anyone who is not brought more or less into contact with the influence of music. If a boy doesn't take it up as a part of his work, anyhow he lives in an atmosphere where it must reach his ear and heart in some degree, and get into his system; in fact, he learns almost in spite of himself, so irresistible is the tide.

Each year, too, more and more boys are keen and anxious to be taught, and the work is becoming a necessary part of the general scheme of school education; and all such elementary training, however dry it may seem to the inexperienced, can be made attractive and pleasant by a sympathetic teacher. Of course, the study of such a subject, even to a gifted genius, is a long and tedious work, and the first beginnings of reading and playing, like other rudiments, should be mastered in boyhood. A child can hardly start too young, because at a later age a beginner is far more inclined to be disheartened; and in no subject is steady, slow, and gradual advancement more necessary. Parents must remember this: they often want to hear their child "play something," and the arriving prematurely at that "something" has to be at the expense of the far more important and steady training; to produce immediate results the boy will have worked with his ear instead of his eye, and such parrot-utterances are bound in the end to be disappointing.

Of course there is the difficulty of time. Some of the hours in the week of unalterable hour-limits have to be devoted to it, and the scheme of work at a Preparatory School must take its shape from the Public Schools, and under these circumstances the young English schoolboy is at a disadvantage; he cannot work like the German.

However, education is becoming more liberal, and this ensures a greater appreciation of art and science: time that used to be utterly wasted by certain boys on Latin verses and Greek authors can now be spent otherwise; the Piano and the Studio and the Laboratory stand a better chance.

But it is at the Preparatory Schools that this work should be carefully started and nursed; it is extremely improbable that a boy will take up music at his Public School or in after life, if the subject has been neglected during his preliminary education.

At a Preparatory School, where boys all live under one roof, the many difficulties are more easily met: times can be arranged, duties dovetailed more satisfactorily into one another, music put into half-hours that do not rob a boy of his play; something of course will have to be sacrificed, but then there is invariably a something which is of minor importance if you will take the trouble to find it.

It is impossible to put down a cut-and-dried schedule of hours that will hold in each and every school; time is found if men care for it and if parents are interested. I would here remark how often it happens that in the holidays when any amount of time might be found, a boy lies idle, and, not only loses ground, but feeling a lack of genuine interest at home, he comes back to school very half-hearted to a work that necessarily requires his best efforts; the parents should be more particular about this.

In all instrumental work encouragement is what is specially wanted. Perhaps at school nothing is more helpful in this respect than well-ordered choir work. The singing is the handmaid of the instruments. At all events, every boy possessing anything like an accurate ear and a fair voice should join the choir. In this way he will have the opportunity of acquiring a general musical knowledge, which will act as a stepping-stone to instrumental progress, and help theory and practice to run more easily together.

Of course the master must be earnest and enthusiastic, and make his subject interesting. A judicious arrangement of vocal exercises and blackboard illustrations all tend to attractive and bright teaching; the ear tests, the elementary theory lesson, the beginning to read at sight, the school songs, all make the boy enjoy his three-quarter hour whilst he is with the choir. And the music connected with the chapel services and the concerts naturally give him a definite and an important object of interest that he always has before his eyes as specially belonging to himself.

In a school of this size (130 boys) we find it necessary to have three choir classes arranged according to merit, and this leads to a healthy competition and enables the master to give more individual attention.

There is no want of suitable music; an interesting selection may be made of Novello's school songs. Stanford's "*Song-book for Schools*" will be found very useful for small boys, as containing an excellent collection of songs in one, two, or three parts.

It will not be out of place to quote Spencer Curwen's remarks on the use of boy singing, in his book, "*The Boy's Voice*":—"Singing, it should be remembered, promotes health. It does so indirectly by causing cheerfulness, a genial flow of spirits, and the soothing of the nerves. It does so directly by increasing the action of the lungs. So far as these organs are concerned singing is a more energetic flow of speech; as we sing we breathe deeply, bring more air into contact with the lungs, and thus vitalise and purify the blood, giving stimulus to the faculties of

digestion and nutrition. A physiologist, in fact, can trace the effects of singing from the lungs into the blood, from the blood into the nerves, and finally into the brain, which of all organs is most dependent upon healthful and well oxygenated blood; boys disposed to consumption have been specially noticed to improve in health after joining the choir; and the medical man who declared that if there were more singing there would be less coughing, expressed in a graphic way the healthful influence of vocal practice."

It is worth considering this among the manifold ways in which mind and body subserve each other's happy interests.

The success of all music work depends greatly on its being popular in the school: the staff of masters, not the music masters only, must believe in it. The man who is keen on the cricket and football of the school must also be a hearty member of the choir, and let the boys see that he is something more than an athlete; if the choirmaster is a gamester, still further is the work helped on. Boys are imitative creatures, always ready to follow a fashion, a strong one as well as a weak one. If some special work is in hand, the choir or the band will always be ready to make use of a spare quarter hour that really is not required for anything else, and so to say would be wasted, provided the community votes music to be "the right thing."

In conclusion, perhaps the greatest reason one has for encouraging music is to bring out the gentle strength of a boy's nature, the double power.

If you can combine refinement with athleticism you then have a very perfect being; Minerva herself carries the distaff and the spear, she is the representative of perfect wisdom, and if school-masters will act under her auspices they will not forget that in olden times she was specially the schoolboy's deity—goddess of athleticism, and inventress also of all musical instruments.

I subjoin the following statement drawn up by Mr. Cheriton, one of my music masters, which supplies some of the detail of the music working in this school, and as he is able to compare it with his experiences in a smaller school, the information may be useful.

W. EARLE.

APPENDIX.

—
 BY MR. W. W. CHERITON.

It is difficult to enter into detail on such a subject as Music in Preparatory Schools. Each school is necessarily influenced by its own environment.

One school will number as few as twenty boys or so, and yet be doing good and useful work in this humanising branch of education; another will possess as many as 130; while the majority, perhaps, vary from forty to eighty boys. Again, one school will possess a chapel, another will not be so fortunate. One school will have one or more masters whose services are entirely devoted to music; another will lack such advantages.

Under these circumstances it will perhaps be best to give, from the writer's own experience, a short survey of the systems adopted, with some measure of success, in two Preparatory Schools whose capacities and opportunities were somewhat different.

The first school in question numbered between fifty and sixty boys. It possessed no chapel of its own. The piano and violin were taught by a lady of much ability and great patience. The singing was taken by one of the form masters.

The whole school was taught singing, with the exception of a few boys whose parents had some objections or other, and the lessons took place on two nights a week, from 7.30 to 8.0, immediately after preparation. The first lesson in the week was usually devoted to the elements of music, with copious use of the blackboard, the singing of scales, sight reading, and the test of single voices. "Hullah's Singing Method," Part I., was used as a text-book. Beating time during this lesson was insisted on. The second lesson during the week was devoted mainly to the learning of school songs, selected from Mr. John Farmer's excellent collection called "Gaudeamus," and as the price of this book was somewhat high (5s.) the school was provided with sixty copies, towards the purchase of which a small charge was made every term, until the books became school property. The five classes into which the school was divided stood or sat together in separate groups, and a healthy rivalry was promoted by little contests between the classes.

In addition to the singing class there was the school choir, consisting of about twenty boys, formed mainly for the purpose of leading the services on Saints' Days at the church which the school attended. Practice for these services took place out of school hours, and some little treat was usually provided by the headmaster every term as a compensation for the loss of play time.

At the end of each term a "school concert" on a small scale took place, the programme generally consisting of pianoforte solos and duets, violin solos, songs, recitations and school songs sung by the choir, while on several occasions Romberg's or Haydn's "Toy Symphonies" were given as *pièces de résistance*, much interest being taken by the boys in getting up these works. Thus, with limited resources, music was made to play a not unimportant part in the school's curriculum.

The second school to which reference has been made numbers, at the present time, 130 boys, of whom 75 learn singing and 70 the piano, and 10 the violin, while two boys take lessons on the 'cello. This school possesses a chapel of its own, a splendid three-manual organ, two masters and one lady teacher whose time is solely devoted to the music of the school, while one of the form masters assists with the singing classes.

The boys who learn singing are divided into three "choirs" of twenty-five boys. Each choir has two lessons a week—three-quarters of an hour (during the winter, an hour) for each lesson. The work done by the third

choir consists of lessons on the elements of music, sight reading, vocal exercises, and the learning of the hymns and chants for the Sunday services, while a song or two is added towards the end of the term to relieve this otherwise somewhat solid bill of fare.

The second choir's work is on the same lines as that of the third, though, of course, the vocal exercises and lessons in sight-singing are more advanced. The work of the first choir is again an advance on that of the second. They are also mainly responsible for the singing in the chapel services, being, so to speak, the leading voice in the Canticles, Psalms, and Hymns. They also sing a different Anthem at every Sunday afternoon service. (It may be mentioned that this school is fortunate enough to possess two altos, two tenors, and three basses amongst its masters.) On Saturday evenings from 7-7.30 all three choirs assemble in the chapel to practise together the Hymns, Canticles, etc., learnt during the week, and the effect of this training on the Sunday services is most marked.

And now a word or two as to those boys who learn some musical instrument. There is, of course, the difficulty of the school time-table. Some time "in school" must necessarily be spent on the giving of music lessons.

The system adopted is to give lessons during school hours as far as possible to the pupils in the lower classes, for it is a fact worth recording that many boys in the higher forms *prefer* to sacrifice an odd half-hour's playtime rather than miss a Class lesson.

Practice time is, and always will be, a difficulty. Each boy is made to practise two half-hours a week, and writes the time at which he begins and ends his practice in books provided for the purpose, which are kept in the music masters' studies. Periodical visits are paid to the different practise-rooms to ensure there being no waste of time.

Nothing has been said about "concerts" with reference to the larger school. A concert, in the usual sense of the word, is here the exception rather than the rule, and for this reason: Every alternate Sunday evening a short musical programme is rendered in the "lecture hall," a large room containing a raised platform, and "graduated" seats, capable of seating 150. The whole school is present, and each boy is allowed to bring in a book to read in the intervals, or even during the music, if he is unfortunately incapable of appreciating the same.

It is on these occasions that the "instrumentalists" are given their opportunity. Naturally, the greater part of the programme—both vocal and instrumental—is rendered by the masters. But as soon as a boy becomes sufficiently advanced he takes his part in the programme with a solo on the piano or violin, or assists in a little orchestral piece for strings and piano.

The "singers," too, are not forgotten, solos being occasionally sung by the boys, and sometimes a part-song is given by the first or second choir.

Thus it will be seen that in this school no effort is spared to make music an important feature in a boy's education, and to instil into his mind a love for the Divine art, which shall influence his after life far beyond that of which he can have any conception.

SINGING IN PREPARATORY SCHOOLS.

ONE of the most health-giving, mind-refreshing, and pleasurable exercises in which children can take part—God's gift of song—has been strangely neglected in Preparatory Schools. It is the exception to find a school where singing is systematically taught. This condition of things may have arisen from the indifference shown towards the subject by the children's parents, or from the presumed difficulty of obtaining satisfactory results from the methods of instruction known to the principals of schools. The period in our national history when, upon the music books being handed round at a social gathering, every gentleman was expected to be able to take his part in a madrigal was followed by one in which Lord Chesterfield's maxim, "If you love music, hear it; pay fiddlers to play to you, but never fiddle yourself: it makes a gentleman appear frivolous and contemptible," ruled the procedure in the domestic circle as in the more public of society functions. Neither in the nursery, in the schoolroom, in the drawing-room, nor in the church has the faculty of singing been cultivated to the extent which the means and opportunities for culture enjoyed by the upper classes would lead one to expect.

This neglect has resulted in the boys in Preparatory Schools being backward in their appreciation of musical sounds, and therefore more difficult to teach in the earlier stages than the children in the Primary (Board and similar) Schools. Musical education should commence in the nursery, by which is meant that the child's musical ear should be trained to distinguish melodies and to enjoy sweet sounds by hearing the mother's, or that poorest apology for nature's own provision, the nurse's lullabies and nursery rhymes. The importance to the subsequent musical progress of children from infancy hearing and imitating such simple ditties cannot be over-estimated. This nursery education is well described by Mrs. Florence A. Marshall in the preface to her *Solfeggi* (No. 26 of Novello's Music Primer):—

"In all teaching that must be best which most closely follows the method of nature. Now, music is a language, and is best learned as speech is learned, the unconscious powers of memory, association, and reason, working together to guide the ear and inform the tongue. The first thing in music grasped by a childish ear is a tune, or fragment of tune. That tune depends for its coherency and charm on certain harmonic laws according to which notes enchain themselves together, and to which every phrase has reference. The little singer knows as much of these

natural laws as he does of those he is obeying while he walks or stands or falls, or as he knows of the derivation of the words and idioms he uses while chattering at his play. He likes the sounds, and the tunes which they make up. He learns to distinguish them as he learns human relationships. Starting from 'my mother,' 'my father,' 'my sister,' and 'brother,' it occurs to him in time that his brother is his sister's brother as well as his, that both are children of his parents as he is. He sees among his playmates the same family ties—brothers, sisters, parents; all different people, relationships the same; hence by-and-bye he realises the idea of a family. Nor, because he sees these always-repeated relationships, does he mistake one individual for another. He knows Jack from Tom, and his own father from Jack's father. So in music, by means of melody, of many melodies all made up of different arrangements of sounds bearing yet certain constant relations to each other, his ear may be trained to recognise each of these sounds as they follow each other in ordered succession. If this takes longer than it takes him to learn his native tongue, it is because he does not hear the language of music spoken around him all day long, so that his musical faculties are only occasionally roused to activity. But as fast as his ear recognises each sound-relation, a sign for it may be given to him by which his eye knows it also. All this has nothing to do with the pitch of the notes. He may perceive that also, and should be led to notice it; but it is a thing apart. A tune he once knows he will know again, whether it be sung high or low, by a man or a woman, or played on an instrument."

Although this kind of nursery education is still greatly neglected, there has been, of recent years, an awakening with regard to musical culture, especially in its instrumental forms. "Fiddling" is no longer looked upon as a frivolous amusement, or pianoforte playing as being suitable only for girls. For many years the Public Schools and Universities have given greatly increased attention to the subject, and have afforded opportunities for vocal and instrumental practice which have contributed greatly to the musical development of the nation, while in the Elementary Schools the benefits the study of vocal music is able to confer have long been recognised. It is, in fact, not too much to say that the moral, intellectual, and physical condition of the children in those schools has been enormously improved by their systematic instruction in singing.

Singing is not only the most natural and heart-stirring of all forms of music, it is, as all musical educationalists agree in declaring, the one which should provide the basis of instruction in the other branches of the subject. Through the use of the voice should be cultivated that mental conception of the sound represented by the written note, which has been called "hearing with the eye," and that other faculty of analysing or naming the sounds heard which has been similarly described as "seeing with the ear." The study of vocal music has also an advantage over that of an instrument, because singing from notes may be successfully taught to large classes, whereas individual lessons

are required by the learner upon any kind of instrument. Another and a very important reason for commencing with singing is that a much smaller amount of time will produce far greater results than are obtainable from instruction upon the pianoforte, violin, or other instrument. The latter point is one which would doubtless weigh with the principal of a school who desires to introduce or to extend the study of music among his boys, but who is deterred by the difficulty of finding time in the already crowded school curriculum. The circumstance that a considerable proportion of the boys on entering the school are unable to sing the simplest tune from memory; that others are unable to repeat a phrase of "God Save the Queen" after a pattern has been given; and that some cannot even imitate a single sound or alter the pitch of their voices higher or lower at the teacher's request, need not create a feeling of despair in that principal's mind. Frequent and carefully graded lessons given upon a good method will effect wonders. Inability to sing almost invariably arises from a defective or neglected ear, not from an absence of voice. By degrees a boy's dormant musical perceptions may be awakened, his ability to imitate given sounds would follow, and ultimately it may be possible to train him to produce musical intervals at will. This training in the case of some boys is a very slow process, and it has to be considered by those responsible for their general education whether or not it is worth while to persevere with them. The experience of a school where great attention has always been given to music may here be quoted. About one-third of the new boys are musically inclined, and can quickly be taught to sing, the remainder are more or less deficient in ear. Of the latter, those who fail to master the tones of the major scale after two or three terms are put to other work during the time of the singing lesson. These non-singers vary from one-quarter to one-third of the whole school.

The subject of instruction in singing may be divided into three branches: (1) Voice Production, (2) Singing from Notes, and (3) Rendering Songs or Part Singing.

Under the first head would come breathing, breath control in voice production, vowel quality, and resonance. Much could be said upon these matters, and specialists in this department of musical training would desire that all teachers should go through a complete course of study in these essentials. Failing a thorough knowledge of the subject (and it must be admitted that voice specialists differ considerably upon almost every detail of voice production) a short course of lessons in breathing and cognate exercises would greatly increase the teacher's usefulness. If no school took up the practice of singing until it was possible or convenient to engage an expert in voice training, it is to be feared the majority of schools would remain unmusical, or, at least, non-vocal. When voice production shall have been taught for years in all the Public Schools and Universities, assistant masters will be available for Preparatory Schools who have a thorough knowledge of the subject. At present the

heads of schools must be content with masters who show aptitude for singing, who can set a good example in quality of voice and general style, and who will observe and correct flagrant errors of the pupils. Suitable exercises for the teacher's use may be found in many Voice Training Primers. Special attention should be directed to securing pure tone, every symptom of harshness being corrected by insisting on soft singing with the mouth well open. Flat voices are frequently corrected by the use of chordal exercises instead of scales, and, where there is a tendency to force the "registers" upwards, the voice should be trained by downward scales sung softly.

In teaching to sing from notes, or sight-singing as it is commonly called, success will greatly depend upon the method of instruction employed. The playing upon a piano of the exercise or piece to be taught until the pupils have learnt it by ear is most strongly deprecated as a waste of time and intelligence which no head of a school should tolerate. By sight singing is meant the unaided rendering by single pupils, or a class, of music the notes of which they have not seen or heard before. A method must be found which will appeal to the musical capacities of the boys, and one which should be able to develop the power of singing in the case of children who have been deprived in their earliest years of the inestimable advantage of nursery training. The first thing to be done is to lead the pupils to recognise, name, and sing the "family of tones"—the key tone and six related tones forming the major scale. The simplest possible sign should be used to denote each musical fact learnt. No calculation or analysis should be required before the pupil can find the name of the written note the sound of which he is to give. To attempt to teach a number of signs—clefs, sharps, flats, time values of notes and rests, key signatures, time signatures, &c.—as many teachers do at the outset of the singing course, is to invest the subject with perfectly gratuitous difficulty, and to render it practically impossible for any but the musically gifted children to make progress.

The ability to individualize the tones of the scale, to make each tone as clear to the mind as colours are to the eye or textures to the touch, has been for many centuries chiefly accomplished by the use of the Italian syllables *do re mi fa sol la si*, in some form or other. Unfortunately they have been employed in two opposite senses, in one case representing fixed sounds, and being merely other names for the alphabetical designations of notes, *i.e.*, $\begin{cases} C & D & E & F & G & A & B \\ do & re & mi & fa & sol & la & si, \end{cases}$ and in the other case indicating relative pitch or key relationship. The former or fixed *do* method was adapted from Wilhem's system as practised in France and Germany by the late Dr. Hullah. After many years' trial in the training colleges and elementary schools of this country, as well as in public singing classes and choral societies, the system was found to be a failure. Previous to this period the movable *do* had always been in use, and proof of what could be accomplished in sight singing by the application of the syllables

to express key relationship was given by John Curwen in his "Tonic Sol-fa Method of Teaching to Sing." Under the guidance of Her Majesty's present Inspector of Music (Sir John Stainer) the movable *do* has been reinstated as the officially approved system of teaching, and since then skill in singing has progressed by leaps and bounds in the Training Colleges and the State-aided schools of the country.

Much of this success is due to the simplified notation with which the return to the movable *do* was accompanied. The pitch of sounds is represented by the first letter of the syllables before mentioned (with the substitution of *t* for the *s* of *si*), thus: *d r m f s l t*. Higher and lower octaves are shown by figures, thus: —*d*¹ *d*² *d*₁ *d*₂, etc. Names are provided for the chromatic tones (sharps and flats), and changes of key in the course of a tune are shown by a double name—that of the sound in the old key and the name it assumes in the new key, thus *^sd* (meaning that *sol* becomes *do*). This is called a bridge note. Accent is indicated by bars and colons, which, placed at regular distances along the paper, give a pictorial representation of duration of time. Divisions of the pulse, or beat (the unit of time value) are shown by a dot or comma placed in certain positions. The general appearance of the letter notation, as also its simplicity in the representation of a difficult passage, may be illustrated by an extract from Spohr's Oratorio "The Last Judgment."

à tempo.



They stand be-fore God's throne, and serve him day and
 night.

CIT.



And the Lamb shall lead them to fountains of liv-ing
 waters, and God shall wipe a-way all
 tears, . . shall wipe . . all tears from their eyes.

à tempo.



And the Lamb shall lead them to fountains of liv-ing
 waters, and God shall wipe a-way all
 tears, . . shall wipe . . all tears from their eyes.

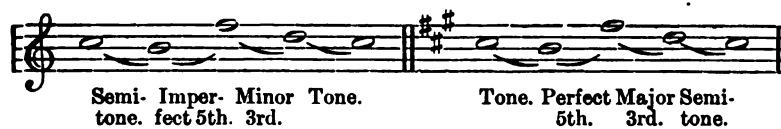
Ability to sing from the letter notation is gained by the study of the character, or mental effect of each tone of the scale, and by the use of a diagram called a modulator. The teacher having established the key by singing or playing the tones of the Tonic chord points on the modulator to the syllable he wishes the pupils to sing, and they immediately respond with the proper sound. All the tones of every scale are shown in this diagram in their theoretically correct position, according to the perfect, not the tempered, scale; and constant practice in singing from the teacher's pointing so impresses the relationship of tones and keys upon the mind's eye of the pupils that they are able to sing the most difficult intervals, and to make transitions into very remote keys with the greatest confidence and accuracy.

Experience incontestably proves the advantages of commencing the study of vocal music by means of the Tonic Sol-fa method *and Notation*. This is especially the case with young children and those who are not musically gifted. By numberless processes the musical ear of the pupil is awakened, and his voice trained to obey the mind's bidding. But the method of teaching can to a very great extent be applied direct to the Staff Notation. The same individualising of the tones of the scale by their mental effects, the power of singing the various syllables as pointed to on the modulator, the recognition of those tones as sung or played by the teacher, enable the pupil, after the necessary explanation of the Staff, to sing from it by following the teacher's pointing upon the lines or spaces with an approach to the facility he has acquired upon the modulator.

The great difference between singing from the modulator or Tonic Sol-fa Notation and singing from the Staff is that in the one case the pupil is told by the syllable or letter which tone he is to produce, while in the other he has to find out what name to give the note before he can think about its sound. As there are seven different key or scale positions on the Staff (without using enharmonic equivalents) and seven notes in each scale, it follows that the singer from the Staff must be able to instantaneously recognise and name forty-nine positions—in the limited range of seven notes only—compared to the one series or letters *d r m f s l t*. To this difficulty has to be added, as the pupil progresses, the study of the key signatures, 13 in number, and the properties of accidental sharps, flats, and naturals.

That any difficulty arises from the letters being printed on a horizontal line instead of taking their positions one above the other according to their pitch, is a fallacy which five minutes' practice in singing from the modulator and letters will dispel. On the other hand, the statement that the Staff is "pictorial" and renders singing easy by telling the performer when he is to raise his voice and when to depress it, is one of those half-truths which are more misleading than a decided untruth. While notes on the Staff Notation do tell the singer when to raise his voice they fail to tell him how much. The Staff itself does not show the difference between the tones and semitones of the scale, and as by changes of key signature these differences are moved all

over the Staff, the singer has always to discover the exact distance from note to note before he can calculate the pitch. The following is an example in which, although the notes in the two phrases are upon the same degrees of the staff, the intervals of pitch are in every case different.



The difficulty of calculating the exact pitch of the notes is overcome by the plan of Sol-fa-ing with the movable *do*, that is so long as the music remains in the key indicated by the signature, but when changes of key are made by the introduction of accidentals, as in the example from the "Last Judgment," the singer has again the troublesome task of discovering the intervals and the key produced thereby, and of giving the notes the correct sol-fa name, or of otherwise determining the pitch.

In the experience of the writer, and of a great number of others who have made the teaching of singing from notes a life-study, the simplest and surest way to teach pupils to sing from the Staff Notation is to commence with the Tonic Sol-fa Notation. The transition from the letter notation to the Staff can be rapidly made. Everything learnt in the one system is utilised in mastering the technicalities and anomalies of the other. Average pupils so trained have a mental grasp of the subject that is reached only by the specially gifted pupils who have been taught in the ordinary way.

The third division of the subject of singing in schools, that of the rendering of songs or of two-part, three-part, or four-part pieces, need not be discussed at length. If the boys have been taught to sing from notes, and music suitable to their acquirements has been chosen, the lessons will be enjoyed by all concerned. A very great number of pieces written for boys' voices in one, two, and three parts are obtainable, and should any of the masters be able to sing tenor or bass, the field of selection will be immensely enlarged. To prepare a number of part songs for a school concert or other occasion when a little vocal music is desired will be an easy and a pleasant task to both teacher and pupils. Nor must it be forgotten that every new piece sung from the notes is an addition to the pupil's skill and experience. When he leaves for a Public School he will take with him a musical voice, a trained ear, and the power of reading music at sight, which will be most welcome to the school authorities, and which will enable his musical education to proceed steadily according to his parent's or his own ambition.

It is, of course, quite possible to have singing practices—they can hardly be called lessons—in which pieces are got up "by ear." The waste of school time, the weariness of the pupils, and their probable distaste for singing when practised under such

conditions, to say nothing of the almost inevitable irritability of the master who has the drudgery of such parrot-like work, are sufficient reasons for the condemnation of such an uneducational proceeding.

Two points naturally arise for settlement by the principal of a school after he has decided to introduce singing from notes. Who is to be the teacher, and when are the lessons to be given? The school may be so situated that a visiting professional teacher of singing is not obtainable, or if he be, the expense may be more than it is wished to incur. In that case, even if not by preference, recourse must be had to the ordinary school staff. One of the resident masters, who has a fair voice and a good musical ear, who is also patient and thorough, should be selected. Such an one with a little personal application in studying the method previously described should be able to secure quite satisfactory results. Importance is attached to the condition that he can sing, not necessarily that he plays the piano. He must be able to pattern with his voice the notes, intervals, and phrases he has to teach. He should be an adept in the use of the blackboard, a teaching appliance that can scarcely be used too much, since by its means the pupils' minds can be concentrated upon what he is telling them. Having to write his illustrations he will be less likely than when using charts or books to introduce signs and terms that are unfamiliar to the pupils, or are not absolutely necessary for the purpose of the lesson. Large printed diagrams or charts are convenient in many respects, but they generally contain much more than the teacher wants at the moment, and consequently have the effect of setting pupils' minds wandering. The younger the boys the more should the blackboard be used in preference to charts or books. If the resident master has had little or no experience in teaching singing it would be desirable for the principal to arrange for periodical supervision of the work of the class by an expert. This would serve the twofold purpose of ensuring that the instruction was proceeding on correct lines, and of stimulating teacher and pupils to do their best in preparation for his visit.

When should the lessons be given, and of what duration? Undoubtedly they should form part of the ordinary school work, and should not be taken from playtime. To relegate a subject to a time which makes it seem like an "imposition" is naturally to make it unpopular; in such a case no one can be surprised if the singing lesson becomes "flat, stale, and unprofitable." Immediately following games (cricket, football, &c.) should be avoided, for then the organs of the body require a period of rest; and the same may be said of going direct from a meal to the singing lesson. An hour ought to elapse between a full meal and vocal practice.

In music, as in other subjects of education, short and frequent lessons produce the best results. Two lessons of thirty minutes each per week would be better than one of sixty minutes. When a teacher can impart variety to his lesson by dealing in an

interesting way with breathing, voice production, exercises in tune, in time and expression, one or two fresh points of notation or theory and the practice of some rounds, two-part songs, etc., sixty-minutes' lessons will not be too long, unless in the case of very young boys. Where two lessons of sixty minutes can be arranged the school may claim to be exceptionally fortunate in a musical sense, and the results should be satisfactory in a proportionate degree. The sweet singing of a hymn at morning and evening prayers is also very helpful in keeping the boys' voices under control and their ears attuned to musical sounds.

Lastly, it may be said that a school cannot be made musical wholly to order. To afford facilities for the study of singing is to go a long way towards securing fair progress, but the boys are quick to discern whether or not the principal attaches importance to the singing lesson. If, with Martin Luther, he can say, "Music is a fair and glorious gift of God; I would not for the world renounce my humble share of music," and speak and act accordingly, the path of the singing master will be cast in pleasant places. Then assuredly will the teacher exert himself to satisfy his chief, and the boys respond to the efforts of their teacher. Then will the singing lesson be looked forward to as one of the pleasure-giving events of the week, and the ability to sing in part-song, glee, or chorus be recognised by the boys as one of the most delightful acquirements of their preparatory school life.

LEONARD C. VENABLES.

GARDENING, ITS ROLE IN PREPARATORY SCHOOL LIFE.

THE writer has no other qualifications for the task imposed on him than those which a love of flowers and the supervision for many years of a few small gardens worked by the boys of his school confer. If, in spite of this, he ventures to give some practical hints, it is with the hope that some who from inexperience might otherwise decline the attempt may be encouraged to start gardens for their boys.

It is plain from the nature of the case that "gardening" is possible at school only in a very restricted sense, for the tenure of each garden is of such short duration, and the interruptions occasioned by holidays, and the claims which other occupations make upon the owners, are so many, that anything approaching the consistent growth and development of a garden is out of the question. Added to this there is usually but a limited amount of ground available, even if there were time for cultivating a wider area. But even if all forms of landscape gardening are excluded and the cultivation of perennials is debarred by the rapidity with which gardens change hands, it is still possible for a boy in the course of a single school year to derive no little pleasure from the management of his plot. And the more the management is left in the boy's own hand the greater will be the pleasure and the profit to himself. Given an ordinary loamy soil such as is found in most gardens, the boys may be left to prepare the ground for themselves unless it should so happen that among them none has had any experience of the sort before. Given one boy with the requisite knowledge how to trench a piece of ground and prepare it for the reception of the bulbs and plants intended for cultivation, the rest will speedily imitate him. Should the soil however be exceptional in any way, inclining too much to clay or to sand, it would probably be better to have its defects remedied by the gardener before handing it over to the boys. The length of the garden is immaterial, but for convenience in working it a width of three, or at the most of four feet, will probably be found the most satisfactory. Grass paths between the plots are theoretically more attractive, but in practice too often resolve themselves into slippery mud or bare road, so that it is better to have the paths gravelled and tiling let in nearly level with the path. These paths the boys will keep clean and tidy, whereas their well-intentioned efforts to make the grass grow only result in failure. An abundant supply of water close to the gardens is a necessity—if possible a pipe or a cistern should be fixed, with space enough under the

tap to place the can, and a trough should be provided to catch and carry off the spare water. The tools required are practically two, a rake and a trowel, unless the ground has to be prepared. To these must be added a watering-can with a fine rose, which should be soldered on. Rake, can, and trowel should all be numbered, and each will have its separate peg on which to hang, when not in use. As to the time which may be profitably allotted to gardening, few masters will be inclined to question the wisdom of confining gardening operations to such times as are not appropriated to any organised games, and such opportunities will naturally be found in the summer towards the evening, and in autumn, winter and spring, in the breaks which occur in the morning's work and immediately after dinner. On Sundays, too, much time can pleasantly be devoted to their gardens. The busy periods of preparation will be, as a rule, at the end of September the middle or end of March, and the middle of May. At the end of September the main planting of spring-flowering bulbs takes place. It is essential that this operation should not be deferred, for two reasons: (1) The soil is then still warm, and enables the bulbs to make vigorous root growth before the cold weather comes on; (2) the bulbs as a rule deteriorate by being kept out of the ground an unduly long time. Some little assistance at first will probably have to be given as to the depth at which the bulbs should be planted, and care will be necessary in seeing that all the bulbs of the same sort are planted at an uniform depth. If this precaution be disregarded the effect produced will be patchy and unsatisfactory. Advice, too, will naturally be asked for as to the sorts of bulbs it will be best to buy, and all must be dissuaded from investing their money in the purchase of one or two bulbs of a great many different sorts; probably, however, several boys will prefer to follow their own inclinations, and then in February and March it will be easy to convince them how much more effect can be produced from a single patch of some one gem than from the flowers of single bulbs of many different sorts. It will be found useful in soil at all inclined to be heavy to plant all bulbs on sand—not only does this serve to protect the bulbs during the winter, but its presence also acts as a danger flag when digging in the border. In planting a group of bulbs the soil will be dug out to the necessary depth and width, the bottom will be made flat, but not hard, a layer of sand of uniform thickness, sufficient to cover up a third of the bulb, will be placed on the bottom, into this the bulbs will be lightly pressed, the label will be put in the centre of the group, a little more sand thrown on the bulbs and the earth replaced, and the planting is done. Then as soon as the days begin to lengthen, should the weather be at all favourable, the various bulbs will begin to push their heads through the ground—winter aconite, snowdrop, crocus, squill, iris, Glory of the Snow, and many more. All through February and March and even into April the flowering will continue.

It will be well to devote only a portion of each plot to the bulbs—if the whole ground is occupied with bulbs a difficulty

will arise when the time comes for putting in the summer occupants of the bed. This difficulty will usually be solved in a rough-and-ready way by digging up all the bulbs regardless of whether they have completed the ripening process or not. By confining the bulbs to one portion only and planting them close together a better display is made in February and March, and a reprieve is gained, by means of which the bulbs will probably be more or less ripe before they are dug up. If it *should* be necessary to clear the bed, the bulbs should be dug up and at once laid in, covered with some inches of soil and left there to ripen. There is generally some sunny corner available for such a purpose, as a very large number of bulbs can in this way be packed into a very small space.

Should the weather in the middle of March be favourable and the ground fairly dry, it will be well to sow the seeds of any hardy annuals desired. It is true that many—*e.g.*, poppies—are best sown in July, to bloom the following summer, but at that time the garden is fully occupied and no space will be available. The ground should be worked with the rake, and any lumps broken up, and the surface made smooth and fine. The seeds must be sown thinly and covered with a little fine soil. Birds are very fond of using any newly worked soil as dust-baths. This can be to some extent prevented by fixing twigs in the soil and running *black* thread backwards and forwards from one to the other. Where heather or ling abounds a thin layer of either will keep off the birds, but this must be removed when the seedlings are well above ground. Should the weather continue dry the beds must be watered with a fine rose. The size of the seed will be a rough guide as to the depth at which it should be planted, the smaller the seed the less the soil above it. By the end of the Easter holidays the plants should be well up, probably many of the patches will be the better for severe thinning. Now comes the time for filling up the beds. Many boys like to bring their flowers from home, and such a natural desire is not to be thwarted, save in so far as it relieves the boy of the trouble and thought involved in setting out his garden, the value of which from an educational point of view will be proportionate to the amount of reflection and taste bestowed upon it by the owner. In the grouping of plants, the selection of an edging, the choice of climbers, abundant scope is provided for the display of judgment and knowledge, while the patience and perseverance of all will be tested by the constant warfare to be waged with weeds, and every form of insect, and other plagues. Plants suitable for summer bedding can be procured in endless variety, and at a very cheap rate, from any good nurseryman; but it is well to go to a leading firm, as much of the beauty of the garden will depend on whether the strain, *e.g.*, of *salpiglossis*, be a good one or not. As soon as a reasonable time has elapsed for getting the garden into order, systematic inspection will take place; mistakes will be pointed out and comparisons made, from which all will learn. Zeal will be encouraged and slovenliness corrected—and as a rule a healthy spirit of emulation will be created.

Nothing has been said as to various forms of gardening which in one case or another may be possible, such as the rock garden, the bog garden, the wood garden, because the necessary conditions do not universally obtain—the happy possessors of such opportunities will not be slow in availing themselves of them.

If we have to exclude the cultivation of perennials, as often requiring years for the development of their full beauty, and occupying more space than can usually be allotted; of biennials, for the flowering of which few boys would wait; and of all tender plants requiring the protection of glass, it may be asked whether the results attainable are worth attaining. This question will best be answered by considering what gain should result from even such a limited form of gardening as has been sketched. And in the forefront should be placed the creation or development of a taste for beauty, not only in colour but in form, not only in flower but in foliage and habit, the recognition of which will give an additional interest to every walk. A second advantage would lie in the impetus a study of plant life gives to the powers of observation and comparison. Endless are the points of interest which occur in one's garden from January to December.

In gardening, again, will be found a solution for the happy employment of many an interval which might otherwise be unprofitably employed; a love of neatness and orderliness will result and will grow with years, while such a rough working knowledge of the essentials of garden lore will have been acquired as will render easy and desired the creation of a garden whenever and wherever the opportunity for doing so occurs.

A short list is appended of bulbs, annuals and summer bedding plants which will prove satisfactory under most circumstances.

Daffodils.—Barri conspicuus, pallidus præcox, minor, cynosure, Sir Watkin, Johnstoni, Queen of Spain, obvallaris, Golden Spur, Emperor, Empress, Horsfieldii, campenelle rugulosus.

Anemone.—Blanda, apennina, nemorosa and n. flore pleno, fulgens, stellata, and, in hot positions, palmata.

Scilla.—Sibirica, and S. multiflora, which is three weeks earlier.

Chionodoxa.—Luciliæ and Sardensis.

Iris.—Reticulata, histrioides, persica, hispanica and anglica, the last two flowering in June to July; hispanica flowers first.

Winter Aconites.—One of the earliest flowers to bloom.

Grape Hyacinths (Muscari).—Azureum (flowering in Feb.), botryoides, b. album, b. leucophæum, Heldreichi, paradoxum.

Dog's Tooth Violets (Erythronium).—Red, white, and purple varieties, as well as giganteum and grandiflorum.

Crocus.—In addition to the ordinary Dutch sorts (Mont Blanc, white, Sir W. Scott, striped, Purpurea grandiflora (fine blue) for spring flowering, C. imperati, and if autumn-flowering kinds are required, speciosus and pulchellus.

Hardy annuals for sowing in March or in September to flower the following spring, might include Agrostemma, Sweet Sultan

Argemone grandiflora, *Bartonia aurea*, varieties of *Clarkia*, *Collinsia*, *Convolvulus minor*, *Delphinium ajacis* and *D. consolida*, *Dimorphotheca pluvialis*, *Erysimum Perofskianum*, *Phacelia campanularia*, *Gilia achilleæfolia major*, *Glaucium tricolor*, *Godetia*, *Hibiscus africanus*, Sweet Pea, *Leptosiphon*, *Limnanthes Douglasii*, various *Linarias*, *Linum grandiflorum*, *Lupinus Hartwegii*, *Nemophila insignis*, and others, *Nigella hispanica*, Shirley Poppies, *Viscaria oculata*, *Whitlavia grandiflora*, *Nasturtium*, *Silene saponaria*, *Mignonette*, *Platystemon californicus*.

While the occupants of the beds during the summer would naturally consist of geraniums, especially ivy-leaved and bronze-leaved varieties, Cherry Pie, Begonias, Balsams, Fuchsias, *Ageratum*, *Lobelia*, *Erinus* (Blue Stone is one of the best varieties), Cornflowers, Pansies, Indian Pinks, *Calceolarias*, *Gaillardias*, *Petunias*, *Perilla*, *Salpiglossis*, Scabious, Asters, Pansies, *Pyrethrum aureum*.

A. C. BARTHOLEMEW.

HEALTH AND PHYSICAL TRAINING IN PREPARATORY SCHOOLS.

THE aim of this article must be twofold. (a.) To discuss some of the problems presented to the headmaster of a preparatory school in connection with the general conditions of health in his school and the physical training of his pupils. (b.) To mention some of the methods employed by the writer or known by him to be employed in schools similar to his own.

There is no need so much as to mention the use of specific remedies for specific diseases. These are the province of the medical adviser, not of the headmaster. The latter can only be held responsible for the general conditions which go to make up the healthy life of the school. I shall allude to what I consider the right relation of the doctor to the school. It is the doctor's business to show interest, and to give advice in all matters connected with the health of the school, sometimes even to veto or insist upon some detail, but it is the master who is responsible for the general conditions, and we may venture to claim that he is better qualified to organise and control these than any doctor who has not been the head of a nursery of small boys varying in number from twenty-five to sixty and upwards.

Perhaps to a greater degree than any other kind of professional life, that of the school-master is liable to sudden anxiety on the score of health. By its nature it is so, and if he would reduce the frequency of these occasions to a minimum he must needs think much and deeply of them. It is not an easy thing to do this and not let the rest of the work suffer in consequence. The man must be strong in nerve and self-control and sympathy and tact, and above all strong in foresight. He will not meet with much sympathy, indeed he does not wish his thoughts to be apparent. They must permeate not pervade every department, or they will spoil the whole. Until he has himself seen the consequences of some apparently trivial omission, has known what might have been saved by a little more care, a man, especially a young, strong, athletic man, is naturally inclined to look upon details of care as coddling and softening. It is right enough and a wholesome corrective that he should think so as a private individual, but as a head master he will not think so. He knows that the Spartan treatment upon which Jones will thrive means pleurisy or bronchitis to Brown, and since he has to arrange for two dozen Jones's and two dozen Brown's, it is difficult to persist in as hardy a treatment as he would like. Consequently health occupies and must occupy as much of his mental horizon as other parts of his work. Is there not even a subtle danger lest in some schools, especially in small schools, or schools in well-known health resorts, the care for health should occupy more of the horizon than the care for character.

To proceed to details. It is obvious that the first care should be to exclude epidemic diseases. It may be said "No," the

first care should be positive not negative, to secure good general conditions, not to be on the look out for diseases. The order is immaterial. Let us take the negative and exclusive side first, for I submit that in doing the one you will not leave the other undone. No precaution which can be backed by reasonable medical authority can be thought superfluous. The saving clause should be noticed; the doctor must be at the master's back, else fads and fuss are inevitable. The doctor may have fads, the doctor may appear fussy, let him! The master may not. The one knows, or is expected to know, what he is about. The other may have "nerves." Drainage, water supply and sanitary conditions must be not only perfect, but regularly inspected. A terrible burden is this perfection sometimes, but a necessary one, and recognised as such by all. It is vexatious to be always liable to the information that such and such a "trap," or ventilator, or shaft, which was recommended by the highest authority a year or two ago, is now found to be inadequate, or ineffective. The circumstances have changed; the school has grown, sanitary science has progressed. What is to be done? must we be always changing? always tinkering? It looks like it sometimes; but I believe the only common-sense attitude is, first to get an expert who can be trusted, trusted, that is, not only to know what is best, but also to seek his employer's interest as well as his own, and refrain from unnecessary patchwork and expenditure, and then to carry out his instructions. There is no middle course; workmanship and system, whatever it may be, must be of the best. Makeshifts and *laissez aller* will bring their own punishment, and, alas, not to the schoolmaster alone, but to those whom he has deceived. In this context I may perhaps mention what I believe to be a want. There are many excellent and reliable sanitary engineers, and many ways—good, bad, indifferent—of inspection, from the local M.O.H. to the diplomaed and titled professor of public health, but what a diversity in their recommendations, and in their charges! If public authority is to touch private venture schools at all, can it not begin with this: To give us some sanitary court of appeal, to do for us what the Local Government Board does for public works and offices, or at least, if not to compel us to submit to inspection, to allow it to us, an inspection to which we could turn confidently, knowing that it would give us an honest and unbiassed opinion. Nay, I believe it would be best if it could compel us to conform to its regulations. We should then know what we are doing. Public inspectors and engineers are of course not infallible, any more than private experts, but we should at least be delivered from the uncertainty as to whose advice to follow; from the haunting fear which overtakes the most guiltless at times that in the hands of expert and contractor he is but a defenceless prey.

It is the practice in almost all schools to demand a certificate of health from the parents at the beginning of each term. Some use forms drawn up by themselves; others such as may be found in Dr. Clement Dukes' "Health at Schools"; others again, those issued by the Medical Officers of Health Schools Association. It

would be perhaps best if the same form was adopted by all, but the difference is one in detail merely. The point of chief importance, and I may say of the greatest difficulty, is to secure that the questions upon such certificates shall be conscientiously answered; and any quarantine regulations that may ensue therefrom, shall be properly carried out. A certificate that a boy has not been, to the knowledge of anyone connected with him, exposed to infection during a prescribed period is of course no absolute guarantee; but it at least secures that the question shall be considered before he returns to school, and emphasises the importance of the question in the interests of the school. In my experience it is certainly the exception, not the rule, to find any want of sympathy with anxiety on this point, but it is not always so easy to secure the parent's co-operation when his own boy is concerned. It is no doubt very annoying to have to quarantine a boy at home who seems perfectly well, to feel that he is wasting his time, and that after all the chance of his having caught measles or whooping cough or mumps is very slight. It cannot be helped. If any parent who feels this could know what a school term is like with half the boys out of school, with work spoilt, with games disorganised, with all the interest of the school destroyed, he would be willing to fall in with our most rigid regulations rather than risk being responsible for such a state of things, to say nothing of being responsible also for the permanent injury which may be caused to the health of boys more delicate than his own, and for the injury caused to the reputation of a school.

As to the form of such regulations, and the necessary periods of quarantine, and the steps to be taken for proper disinfection of the persons and clothes of boys who have been exposed to infection, we owe a great debt of gratitude to the Medical Officers of Health Schools Association. With their new code in his hands the headmaster is unassailable. He is entrenched, not behind the opinion of his own school doctor—which after all can only count for one as against that of the doctor at home—but behind the opinion of a body of experts to which the home doctor, however he may differ from it, is compelled to bow.

As a provision against sickness when it comes, in every school I suppose there are special sickrooms set apart, and used only for this purpose. In most schools these rooms are in the school-house, either in a separate wing, or on the top story, and easily isolated, and in very many there is also a cottage at some little distance from the school for infectious cases.

From answers to queries on this subject I find a curious divergence of opinion. In most cases it would seem that all ordinary non-infectious illnesses are nursed in the sickroom, while infectious cases alone are sent to the sanatorium. By some headmasters it is thought that it is easier both to nurse illness and to check epidemic outbreaks in the sanatorium, while others assert that it is more difficult to carry out the nursing efficiently in a sanatorium and that, since the first stage of many epidemic illnesses is the most infectious, it is almost impossible to stop

them from spreading when once they are introduced, and that therefore a sanatorium is an unnecessary and complicated luxury. My own experience has led me to the conclusion that where both sickroom and sanatorium are in use there is much to be said for the latter opinion. It too often happens that a boy sickens unexpectedly; he is put to bed in the sickroom; there are no very definite symptoms, and perhaps he is not removed to the sanatorium until the infectious nature of the illness has declared itself after an interval of two or three days. In the meanwhile he has been attended by the school matron, has been visited perhaps by the master's wife, no special disinfectants have been used, and the mischief is done. Or, again, the sanatorium from perhaps long disuse is not fully equipped with all the appliances for nursing and feeding of invalids. The person in charge of it, often an old servant, is quite able to nurse an ordinary illness, but ought not to be in charge of a serious case. The introduction of a hospital nurse is troublesome and costly. The invalid's food has to be sent over from the schoolhouse; all sorts of complications arise, and it cannot be wondered at if, after enduring them for a while, the authorities decide that the sanatorium is a nuisance, and saves you nothing in the long run. One cannot but sympathise with the decision, but I would suggest that there is a better way:—viz. to abolish the sickroom in the house altogether, and to send all cases that require nursing, whether infectious or not, to the sanatorium. There must of course be some room in the house in which a boy with a headache can lie down for an hour or two, or to which a boy taken ill in the night may be removed till the morning; but if he has to go to bed, let him go to the sanatorium. If it prove some trifling ailment requiring only a day or two's rest, he gets the rest and returns to school when he has had it; at any rate no harm is done. Should it prove infectious he has been caught in the first stages, and the risk of its spreading has been reduced as much as possible. Moreover the sanatorium is always ready. The necessary cooking is done in the sanatorium; the utensils are kept separately for the purpose. The caretaker must of necessity be an experienced nurse, and if a hospital nurse be required, her presence is far less noticeable than it would be if she were quartered in the schoolhouse; and lastly an immense saving is effected in the time and worry of the school matrons, who as a rule have very little of either the one or the other to give away. In small schools such an arrangement is often difficult to provide, but the need for it is less. In schools of 30 or 40 boys and upwards, I believe it would be of the utmost value. At any rate I have found it so, and would not give it up for anything. Of course, when an epidemic has once taken hold in spite of all precautions, either sanatorium or sickroom very soon overflows, and the school dormitories must be requisitioned as sick wards. There is nothing for it but to make the best of things, and to disinfect afterwards, but I believe that this necessity for converting the schoolhouse into a hospital would arise much less often if the sanatorium system for all who have to go to bed were more generally adopted.

From answers received the following figures may be of interest.

Out of 70 schools of 30 boys and upwards, 45 have both sick-room and sanatorium in use, 13 have a sickroom only, 12 have a sanatorium only.

Out of 50 schools of less than 30 boys, 24 have both sickroom and sanatorium in use, 25 have a sickroom only, 2 have a sanatorium only.

The division between schools containing over or under 30 boys is a purely arbitrary one, but adopted without any knowledge of how the figures would come out. From these it would appear that in the larger schools the dual system is at present more in favour; in the smaller schools the advocates of the dual system and those of the sickroom only are about equal; but I am encouraged in my belief in the sanatorium only by the fact that among the minority who have adopted it are to be found the names of some of the best known and most successful schools.

But besides the provision for serious cases, and the incidence of epidemic illnesses, we have to consider the methods of meeting and preventing the smaller ailments of small boy life. In an earlier paragraph I spoke of a preparatory school as a large nursery, but one ruled not on the haphazard experience of the uneducated nurse, or, shall I say it, the inexperience of an indulgent parent, but on wise and well-understood principles. In most schools the nurse in this context is the matron. It is to her that the small boy runs with his cut finger or bruised shin. It is she who is the most efficient comforter of the homesick child of 9 or 10 during the first weeks of his school life. It is she who tucks the family up in bed at night, the butt of their chaff, the healer of their woes, the confidant of their troubles—in a word, the family nurse. And it is just this which makes her position one of peculiar difficulty and needing peculiar tact. It is through her that all complaints of health reach the head master. She is the first to hear them. It lies with her to judge whether he shall hear of them at all or not; and as a headmaster one is fain to confess that it is very often her judgment which really decides whether the complainant shall stay out of school or not. If she is wise, as she generally is, she knows this, and will not report without real need; but at the same time the decision should not appear to the boys to lie with her. If it did, a hard time indeed would she have with fanciful complaints. I do not imply by this that the average small boy is a wilful malingerer; far from it; he would be the first to scout the accusation. But he has been taught in these soft days to complain. "Be sure you tell somebody if you feel the least unwell" is the injunction most urgently impressed on him by his fond mother when she leaves him to the care of strangers; and tell he does, if his finger aches. It is quite right that he should tell; he is but a child, and the little weariness or hot head may be but momentary weakness or

fatigue, or it may be the premonitory symptom of a decimating epidemic. For the safety of the public it is right that he should tell; but with the matron it largely lies whether such telling should degenerate into a fixed habit of softness, or shall be, as it should be, a sensible precaution against illness and overwork. In all cases the final decision should lie with the master.

In town schools, where doctors are near at hand, and plentiful, it does not seem necessary to make any arrangement for regular medical attendance. In the country it is essential; and I have found the following plan a practical one. That for a fixed terminal or annual payment, the terms of which may be left to the master and doctor to settle, the latter should visit the school two or three times a week, or even daily. It may often happen that there is nothing for him to see; but on the other hand he will see every case, even the most trifling, that needs attention. An immense responsibility is shifted from the school authorities. The doctor becomes familiar with the boys, a great help to him in dealing with them. There is no question of incurring the medical fee for this or that small ailment. The charge for medical attendance remains the same whether the boy sees the doctor once, or never, or fifty times, and is, when divided among a large number, but a trifling addition to the school bills. And finally, by constant intercourse and familiarity with the school, and all in it, the doctor is enabled to become, as I hold strongly that he should, the adviser in all matters connected with the health of the school, whose counsel shall in no case be set aside.

The general health of a school depends largely on the arrangement of its daily life. For the following outline of these we have the authority of the Committee of the Medical Officers Health School Association. For purposes of discussion I give the recommendations side by side with the questions which elicited them, taken from the "Preparatory Schools Review" for March, 1899.

QUESTIONS.	RECOMMENDATIONS.
(a.) The number of hours of work per week, including all preparation and Sunday work, also music and drawing, but not drill, dancing and carpentering.	For boys of 13½, 30-32½ hours per week: a maximum period of 45 minutes being allotted to any one subject. N.B.—(i.) That no work for the next day should be prepared overnight. (ii.) That the last school in the day should cease at 7 p.m. (iii.) That there should be no school in the morning before breakfast.
(b) Organized games and their duration.	Desirable as far as possible daily.
(c) Periods of leisure, and the possibility of over-pressure from the continuous occupations of the school day.	Boys should have times of leisure for the pursuit of their own special interests—reading, stamp collections, &c

QUESTIONS.	RECOMMENDATIONS.
(d) Food.	
(i.) Number of meals and the interval between them.	8 a.m. breakfast. 11 or 11.30 a.m. light refreshment. 1.30 p.m. dinner. 6.30 or 7 p.m. tea. No food advisable between dinner and tea. Water the best quencher of thirst. Light refreshments at bedtime. At breakfast, meat or some equivalent form of nitrogenous food.
(ii.) Meat, how often and at what times.	At dinner, butcher's meat. After dinner none.
(iii.) Milk.	Boiling not necessary where proper inspection and control of dairies is possible. In any case Pasteurisation is better than boiling.
(iv.) Alcohol.	None to be given except under orders of school doctor.
(v.) "Grub" shops.	From medical point of view undesirable. As a means of teaching small economy admissible under careful management.
(e) Amount of sleep.	For boys from nine to thirteen, eleven hours in bedroom from 8.30 p.m. to 7.30 a.m., securing if possible ten hours' sleep. For smaller boys a little more. Perhaps rather less required in summer than in winter.
(f) Temperature of school rooms and dormitories.	Class rooms should stand at 60°-65° Fahr. with all possible ventilation. A protest was made against rooms being warmed by the introduction of heated air; open fireplaces, where possible, were recommended.
(g) Clothing by day and night.	Care should be taken in all cases that boys are sufficiently clothed during school hours. In dormitories, windows should always be open <i>while</i> the boys are in bed.

With one or two exceptions I think it will be generally conceded that these recommendations do in fact embody the practice at the majority of preparatory schools. Information which I have received through the kindness of headmasters of preparatory schools assures me that this is the case. But it may be interesting to note one or two points of divergence.

(a.) N.B. (i.).—In the majority of boarding schools I find that it is the practice to prepare overnight for the work of the next day. It may be a counsel of perfection that one day's work should be complete in itself, and that the brain should rest unburdened with

the thoughts of to-morrow's construe or repetition; but, in justification of the existing practice, I think it may fairly be asked if this is not just the sort of training which the brain requires. It certainly is a fact that the public schools do and will demand its exercise even in their lowest forms, and it is surely better to begin the training at an earlier stage. Nor do I think that, given reasonable time for the preparation and an appreciable interval before bedtime, the average boy is inclined to trouble himself, or his brain, at all until the time comes in the morning for him to say his lesson. The only cautions that seem to me necessary are that the "preparation" should not be allowed to take more than a set time, and that it should be done under proper supervision. Moreover, it would seem to be a very poor practice for the memory of even quite a small boy that he should not be asked to remember to-morrow what he has learnt to-day, and this I fear is what the fulfilment of our recommendation would in fact lead us to.

The exact figures show that out of 120 schools there are only 23 which return the answer "No" to the question, "Is your last school 'preparation' for the next day's work?" But it may be worth while to note that in preparatory schools the word "preparation" often carries a different signification from that which is understood by it in public schools. In the latter it would mean work done by a boy in his house, or at home, if he is a day-boy, without supervision or assistance. In the preparatory school, from the age of the pupils, and from a knowledge of their limitations, "preparation" implies work done during school hours, under the eye of a master, and generally with a very considerable amount of help from him. When done in this way "preparation" is looked upon as a very valuable added opportunity for instruction. The difficulties which will tax the brain of a conscientious boy, working alone at a late hour in the day, are smoothed away. When his books are put away he can rise from his work with no greater sense of fatigue than that induced by any other lesson. Needless to add the opportunity for idling over "preparation" is reduced to a minimum.

(a.) N.B. (ii).—I find that in the majority of schools work continues till 8 or 8.15 p.m.

In my own school it had always done so until I saw this recommendation, but since that time I have arranged that it shall stop at 7 p.m. This involves a change in the tea hour which does not quite fit in with the recommendations under D 1, and which I will explain under that heading. It will be sufficient to say here that the time thus gained between the last school and bedtime seems to me of the greatest value, in summer for the enjoyment of one of the pleasantest parts of the day, in winter for quiet reading or other pursuits.

(a.) N.B. (iii).—School before breakfast. On this point there seems little to be said. That the recommendation is not universally adopted is, I think, chiefly due to the difficulty which

we all experience in finding time for all the work which has to be got through.

(b.) Organised games.—This will be touched on later in this article, and is fully dealt with in another article in this volume.

(c.) Periods of leisure.—I am happy to find, in answer to a query on this point, that the general opinion is in accordance with this recommendation. In my own experience as an assistant master I have seen the evil of constant supervision and of perpetual organised employment for the boys. The old adage is true, of course, and small boys must be looked after or mischief ensues; but the happy mean seems to me to be found in an intelligent reading of the answer once given to a question on this subject. "The more you think for your boy the better, so long as he does not see it." So long as he does not see it! No system of espionage is here implied; nothing irksome, nothing underhand, but the happy companionship of elder and more resourceful with younger and less self-helpful. The life of masters and boys must outwardly, at least, be one: if only the boy can be induced to forget that his master is not a policeman, but simply his leader in play and interests as well as in work, "supervision duty" may almost be left to take care of itself. We have not yet reached this happy ideal, but that it is generally recognised as an ideal not unattainable is a healthy sign. The common practice is that masters should be in charge of games and meals, and that at such odd times as the latter part of winter afternoons, or in the short interval of one-quarter to three-quarters of an hour in the morning, the boys should expect the masters to be among them, ready to play bagatelle or card games, in and out of carpenter's shop, and library and class rooms, or joining in outdoor games, but should feel free themselves to indulge in their own hobbies at these times, or even in the common "fooling" which most of them love.

(d.) Food.—The whole question of food at school is worthy of a long article to itself. I hope it will not appear too complacent if I pass it over as impossible to deal with in the space at my command, and with one remark that it is rather overdone than underdone at most preparatory schools. The *régime* laid down in the doctors' recommendation is that in common use; but after what was said under N. B. 2. above, a little discussion is advisable on one point. It is said "No food is advisable between dinner and tea." I have found myself that with dinner at 1.30 and tea at 7 o'clock, the interval without food at any rate seemed too long; and I have provided some light refreshment at 4.15, and have put tea as the last meal of the day at 7 p.m., and whether advisable or not, I can only say that this arrangement has proved very acceptable, and far more practical than an early tea and supper the last thing before going to bed. I am glad also to find that the practice is a common one, for I have not the slightest doubt that, though the theory of the recommendation is thoroughly sound, the contrary practice is better.

The afternoon hours thus stand:—

- 2-4.15. Games, &c.
- 4.15. Light refreshments.
- 4.30-6. School.
- Interval of 10 minutes.
- 6.10-6.55. School.
- 7. Tea.
- 7.30-8. Recreation, then prayers and bed.

Of (*d*) (3) & (4) meat and alcohol, I shall say nothing; they involve a scientific medical knowledge to which I have no pretensions.

(*d*) (5). On this point I know that opinions differ, but though having every sympathy with any attempt at training in self-denial, when I am told that the grub shop is an excellent instrument for inculcating this virtue it always seems to me that the remedy for the vice implied is Utopian. Happily I need not touch on its moral side, if it has one; and I confess to a feeling of supreme satisfaction when I listened to the euphemism in the above recommendation. It is to my mind a shameful thing that the dietary at a public school should be arranged on the calculation that boys shall be allowed, and will practically be compelled, to supplement their meals from the school grub shop; or even that so little attempt should be made to discourage the undue expenditure and overeating which is so common. That, however, is a question for the public schools to deal with, slow though they seem to be facing it. That we, who have no old traditions of liberty in this matter, should touch the evil thing is—well, “inadvisable.” And while on the subject I should also like to enter a protest against the admission of hampers or any other food than that supplied by the school. If the school food is not good enough, parents have the remedy in their own hands. Let us court enquiry by excluding all else; with the exception of a short period of slackness I have always maintained this rule, and have found that parents were glad to fall in with it.

(*e*.) Amount of sleep. The usual bedtime of boys of eight to eleven seems to be from 7.30 to 8 p.m. For boys of eleven to thirteen, from 8.30 to 9 p.m. The usual time for rising for all, from 6.45 to 7.15 a.m. This will be found to fulfil the recommendation.

(*f*.) Temperature of school rooms and dormitories. With all deference to our medical authorities, I cannot think this recommendation to have been well considered. Experience shows that a temperature of 58° is quite sufficient for a class-room with eight or ten boys at work in it, and that it should never be allowed to exceed 60° by artificial means. All possible ventilation is of course desirable, and whenever possible the window should be open at the top as well. Of course direct draught must be avoided, and this has to be considered in the arrangement of desks.

Open fireplaces are recommended where possible; for ventilating purposes they are no doubt best, but in small class-rooms

it is difficult to get far away from the fire, an obvious objection in schools of which the classes are necessarily small. In fact, while the majority of our schools do not occupy premises built for school purposes, the best has to be made of existing arrangements.

(g.) *Clothing.* While on the subject of temperature, this recommendation was added. It is a point on which no hard-and-fast rule can be laid down. The chilly boy wants more than his hardier companion. By careful watching the master and matron can generally find out what is necessary. A difficulty sometimes occurs. When the playgrounds are close to the schoolhouse, as they generally are, many boys get into a heated condition during the short intervals between school hours. For the afternoon game, of course, all change into flannels; but this is not possible in the shorter intervals, and yet it is desirable, especially in winter, that boys should run about at these times. The result is that many of them perspire freely and have to sit in their damp clothes during the ensuing school. This is a fertile source of colds, but one which I have never quite successfully checked.

"In dormitories, windows should always be open while the boys are in bed." I do not know whether this is the general rule in most schools. It is, I believe, the rule in all hospitals, asylums, and other institutions over which the doctors have control; it is in accordance with all dictates of sanitary science and common sense, and I hope will soon become a recognised practice in all nurseries and schools.

In my remarks on these recommendations I may seem to have somewhat exceeded my commission, and to have introduced considerations irrelevant to the subject of my article. If so, I would plead that the recommendations were given to us as a general guide to an intelligent arrangement of the conditions of health in our schools, and that in following the course of the recommendations, I have admitted such considerations as seem naturally suggested by them, believing that whatever is conducive to the happiness and comfort of a community is conducive to its health. I use the word comfort for want of a better. By it, I have no idea of implying luxury. I do not believe that an ordinary healthy-minded boy cares twopence for luxury. But it is absolutely necessary to his proper development that the path of life shall be so marked out for him that it shall be easy for him to tread in it. He must of course climb the hills and surmount the difficulties which his own nature will have put in his way. It will be quite hard enough for him to accomplish this, and we shall have done our work well if we have given him an intelligent lead in the attempt. That it should be thought a matter of indifference, nay of possible good, that a child fresh from the nursery should have to face, in addition, and first, the bullying which comes from inadequate supervision, the discomfort of ill-arranged and ill-ventilated and crowded dormitories and class-rooms, the pressure arising from ill-arranged lessons, and the positive hardship of ill-cooked or insufficient meals, is

happily no longer possible in a well-managed preparatory school. That we have altogether done away with these evils it would be foolish to assert, and they have to be constantly watched for and fought against, but I think it may be safely said that we have long recognised that until we have at least reduced these to a minimum, the success of our efforts to induce a healthy moral, mental, and physical condition into our schools will be indefinitely postponed.

So much for the general conditions of health in the preparatory schools. Let us pass to the question of the physical training which is being given in them.

Public interest in this question was to some extent aroused in the autumn of 1898 by a letter in the "Times," signed "M.D.," presumably a school medical adviser in some large public school, and by articles and letters following upon it in other papers. In these it was maintained that far too great a percentage of boys coming to the public schools, *i.e.* boys from 13 to 14½ years of age, were either positively unsound, or at least deficient in physical and muscular development. Such a statement seemed at first, and was taken by many, to be a direct indictment of the general conditions of health in the preparatory schools, and of the systems of physical training employed in them. The more thoughtful, however, maintained that it should not be accepted as such off-hand. Many questions had to be asked first and answered. From what class of boys were the particular boys of whom "M. D." wrote taken? What standards of weight and measurement did he adopt? These are notably different in almost every book on the subject. If he formed his own standards, from what numbers and over what number of years did he make his calculations? Were these calculations made with any knowledge of the corresponding development of boys of a younger age. And finally, granted that the answers to these questions were such as to justify his conclusions, was the blame to be laid at the door of the preparatory schools and upon the three or four years of the child's life spent at the preparatory school, or upon the physical conditions of home life in the average English homes of the class under discussion, and upon the constitutional proclivities of the age?

Some of these questions were asked at the time, but to none of them was any answer given as far as I know, and the interest in the matter passed away for all but those immediately engaged in the training of young English boys. But it must be admitted that, considering the interests at stake in the future of the race, the question is one of vital importance, and whether, granting that "M. D.'s" conclusions are true, the blame be assigned to home life or school life, it is certainly incumbent upon us to see that we do not neglect any reasonable methods for the satisfactory physical training of our boys. That we do not neglect them it is the purpose of the following paragraphs to show, but it may be said at the outset that the task is not altogether a simple one of carrying out certain well-defined courses of instruction. It is too commonly assumed that a boy of a certain age should con-

form to certain standards of height and weight. But, as Mr. Cecil Hawkins has shown, such an assumption is not justified. The average weight of a very large number of boys of any given age may of course be taken, but this number may include boys of very abnormal or very deficient growth, and the average being affected by such, is obviously not a reliable unit. If any unit be taken as a standard it must be the mean measurement or weight between the extremes, and not the average; but for practical purposes it would be probably sufficient to know the limits of growth for any such given age, and marking these to note: (1) Whether a particular boy is within these limits, and (2) Whether his growth from year to year is reasonably continuous.

Unfortunately at present we are without any such guide at all. Mr. C. Hawkins has, I believe, drawn up reliable tables for the weights and measurements of boys of the public school age. We should welcome any attempt to draw up similar tables for those of boys at preparatory schools. As matters now stand we have to be content to watch carefully the continuous growth of our boys. They come to us with varying antecedents and varying constitutions. It is reasonable to expect that under healthy conditions they will show a steady annual rate of growth. The rate will be found to vary from one to three inches per annum, with proportional increase of weight and chest measurement. I have noticed that the rate of increase is not maintained in some boys equally during all parts of the year. And, in order to watch this it is necessary to take measurements not less than three times a year, *i.e.*, once a term. Six times a year gives more satisfactory results, but so long as the annual increase is steady and a boy is generally healthy and in good condition, it does not seem a matter of importance whether the increase is evenly distributed over the 12 months, or is more rapid at some parts of the year and almost absent at others. Growth, however, is a matter of bone and framework, and is dependent on sufficiency of food and general conditions. Training has to concern itself with the due development of muscle in the right place, and with the control of limbs. What measures are taken at the ordinary preparatory school to secure these objects?

Physical training primarily suggests the gymnasium, and I do not suppose that any school considers itself efficiently equipped until it has some sort of gymnasium. But the preparatory school gymnasium has, and I think should have, two very distinct and special uses. It is, first, the place of drill and gymnastic instruction; of the various systems of drill in use I cannot with any confidence say which is best. In some schools the drill is conducted by the masters or by one of them who has made a special study of the subject; more frequently the assistance of a drill sergeant and gymnastic instructor is called in. My own experience shows that, as with all kinds of instruction, drill is popular or the reverse according to the instructor's power of enlisting attention by brightness of manner and variety of exercises, but that with the best of sergeants it is not much liked except by a very limited number of boys. Of actual gymnastics it may perhaps

be doubted whether small boys should be asked to do much. It is generally I believe thought not, but so much at least I think should be taught to every boy as will enable him to climb a rope or pole with confidence, to swing from either hand on a rope, or to pull up to a bar or ledge, in a word to overcome the natural timidity of childhood, and to give such firmness and confidence to his system as is necessary for the ordinary situations in which in his birdsnesting or exploring expeditions he may be likely to find himself. It may sound childish to ask this of an English boy, but I do not know the nursery which provides such exercises, and only very few homes in which the opportunity for them is to be found; and I do know that quite a large proportion of the boys of nine to ten years of age can with difficulty hang at full arms' length from a bar, and so far from being able to pull themselves up to a position of security, can only maintain their hanging position for a few seconds, and then drop like an over-ripe pear in an exhausted condition to the ground. Therefore they want gymnastics as well as drill.

But there is another use for the gymnasium which seems to me of no less importance. It is the covered playground of the school; such a place as is absolutely necessary during the winter terms when there are long and dull afternoons to fill up, and spirits to let off. And as such it should, I think, have some at least of the gymnastic apparatus always ready for use. The more formal vaulting horse and parallel and horizontal bars are best out of the way. Uninstructed efforts on these are undoubtedly dangerous, but swings and ropes and hanging rings are in the first place the sum of delight, and moreover provide in an especial way a splendid opportunity for the exercise of that monkey-like activity which it has been the object of the formal drill and gymnastics to develop. It is probably wiser that a master should be present at such times, and he generally is. It is easy to stop at once any too risky efforts, but he should use great discretion in doing so, for the risks are very small if the boys are not made nervous by overcautioning, and the gain in freedom of limb and general activity traceable to the "monkey-house" use of the gymnasium is quite out of proportion to the danger incurred.

Under the head of physical training I suppose should be placed the singing and dancing classes in vogue at many schools. As a means towards the proper use of lungs and voice organs on the one hand, and towards rhythmical movement and what used to be called deportment, on the other, these are no doubt of use. I cannot speak from experience of the results of either as a systematic exercise.

But before all and above all must be placed, I suppose, the regular school games as the paramount force in physical training at the preparatory as at the public schools. We have been accused of allowing the games to assume so great an importance in our eyes that the victims of our zeal know no relaxation. That when we are not urging to greater mental effort in the classroom, we are hounding on our hapless pupils to a greater

bodily effort in the playground; that the school matches assume an altogether undue value in our own eyes, and consequently in the eyes of our pupils. If it be so, it is an unfortunate and self-defeating oversight in our organisation; but I do not believe it to be a true bill at all. That we do consider that a good school eleven and a good school spirit in all our games are essentials of good and healthy school life we would do more than admit; we should be the first to assert it. To prove that our efforts to secure this are not occasionally overstrained would be a thankless task, but that the zeal for games which induces grown men and first-class athletes to devote hour after hour and day after day to the eager and intelligent instruction of small boys is either waste of time or in any way to be blamed is a difficult thing to believe. By it the small boy learns, as those who have not seen it would marvel to see, the free use of shoulder and arm and leg and eye, and above all the mysteries of "timing" and of instructive co-operation, which go far on the road not only of physical but of moral education. It is apart from the purposes of this article to discuss this branch of physical training at length, nor do I at all assert that the athletic sense of the age is not overburdened; but it would be a grave omission were no mention to be made of this greatest and essentially English branch of the subject. I believe myself that the zeal for games now to be seen in English schools is wholly good. In the pressure of the intellectual side of school life is to be found the greatest safeguard against games becoming to the majority the paramount interest. And if this be in reality a danger, is it for a moment to be weighed against the evils of loafing which that insidious suggestion of more leisure too frequently covers?

Such are in outline the principal methods of physical training in preparatory schools. In a minor degree under this heading should be classed the training of hand and eye in the carpentry class, and in the various branches of natural history open to small boys at school. When a boy myself I attended at the village carpenter's shop at stated times during the holidays to be taught "to carpenter." I did, I believe, achieve one or two Oxford picture frames and a dovetailed box, but I should be sorry to say now how much of either was done by myself and how much by my instructor. Many years ago I saw a school carpenter's shop conducted on the same principles; many and beautiful frames and brackets and cupboards were turned out during the term's course and were exhibited doubtless as "my work" during the holidays; but I happened to pay my visit at an off time shortly before the holidays, and came upon my friend the carpenter just "'tidying up' the young gents' work," and I thought little of the carpenter's shop as an educational medium; but I have seen that it can be bettered. I have watched a conscientious instructor, of the class employed in the technical classes under the County Council, from week to week taking a clumsy-handed class of ten or a dozen awkward-fingered boys up from the first mysteries of sawing straight and planing true, to the higher intricacies of mortising and dovetailing, and

above all of setting out work, and to a divine discontent with an unfinished or badly-turned-out job, and I have seen that the carpenter's shop is one of the best and most valuable of the school departments. The two things that are absolutely necessary for success are a really conscientious trained instructor who will not touch the work himself, and will insist on all work being subject to his scrutiny and criticism, before being pronounced finished.

There is much to be said of the training in observation and quickness of eye to be learned during country walks, and in the collection of birds' eggs or butterflies, or wild flowers, and yet I hardly think this can be dignified by the title of physical training. In the first place, though interest in such pursuits should be; and is always encouraged, instruction in them is never, I think, compulsory and rarely systematically given, and in the second place it is almost impossible to assign any definite place or time in the school curriculum to them. They are therefore to be noted only as among the bye-paths of training proper. In the same category may perhaps be placed the long paper chases and runs which take place in many schools. Of these my experience has been unfortunate. They were probably ill-organised, and were certainly found to be fatiguing, so that I am possibly inclined to underrate their value.

In conclusion I would say that in the preceding pages I seem to myself to have touched on many of the most trivial and perhaps rudimentary parts of a preparatory schoolmaster's work. To others much of what I have written may have come by intuition. By some like myself it has been bought by experience. For neither of these classes should I have presumed to categorise the elements of their profession: but if to those outside the profession, whether the public which has sons to educate, or others who are interested in secondary education, I have succeeded in conveying the notion that there is more for a schoolmaster to do than, as was said to me this very afternoon, "make money for a certain number of years, and then sit down and enjoy it," then at least I shall claim to have in part, fulfilled that which I was asked to perform.

C. T. WICKHAM.

GAMES IN PREPARATORY SCHOOLS.

(CRICKET, FOOTBALL, ATHLETIC SPORTS, PAPER CHASES, RUNS,
GOLF, CYCLING, SWIMMING.)

Upwards of forty years ago I entered upon my first experience of Preparatory School life, an experience similar, no doubt, to that of many of my contemporaries, though differing materially from that of men of younger standing: the system was then in its infancy, the public schools still absorbed a considerable proportion of the annual supply of ten-year-old boys, and although Preparatory Schools did exist here and there, they were mainly small in size and forerunners rather than types of the vast host that has followed them, largely based on old-fashioned principles, and only tentatively admitting the more modern ideas that were beginning to be ventilated. At all events, so far as my experience went, the schoolroom was the school; we ate (on a most liberal scale in our case; others may have been less fortunate), we breathed fresh air (for $1\frac{3}{4}$ hours daily), we slept (for nearly 10 hours) in order that we might return to the classroom for work; that work was enforced by coercive measures which were as simple as they were rigorous; they passed uncriticised as being natural and foreordained; in the sweat of our face we ate bread, and the child was not spoiled for want of the rod. Like the other ten-year-olds I sat from 6.30 until 1.0 with only a single half-hour's interval for breakfast; neither better nor worse than the others, I experienced the frequent application of the most primitive instrument of instruction, and the hand that applied it was that of an earnest, generous, and warm-hearted master, who, if he spared us little, spared himself yet less.

It was a small school, and our games were neither organised nor supervised in the modern sense; indeed, they occupied too subsidiary a position. Nature, for reasons of her own, demanded a daily tribute of bodily offices, and among them the respiration of fresh air and the exercise of muscular tissue; Nature should not be balked of her due; but the sooner such animal needs were satisfied, the sooner we got back to real business. A stern system, perhaps, but faithfully carried out in what were considered our best interests, and accompanied by unlimited personal kindness.

If my experience should seem to have been exceptional, I can only say that within my small horizon it tallied with that of my elders, as recounted by them, and that I knew no other: the legend that first met my eyes at my Public School echoed the

old refrain, "*Aut disce*," and a painted mitre indicated the reward of learning, "*Aut discede*," and the picture of a sword suggested a creditable refuge for the idle and the empty-headed, "*Manet sors tertia*," and the symbol of this third alternative was not a spliced Cobbett or lemon-shaped football, but a painfully realistic representation of the flogging rod of the time. The legend has long outlived its application, but there are men yet living who speak with regretful respect of the merits of the old-time system; on its defects, however, modern judgment has pronounced unequivocally.

I presume that it was the extension of railways throughout the country which led to the large increase in the number of our Public Schools, and to a concomitant freshness of ideas concerning aims and methods of education; also that the greater facilities for travelling reconciled the parent to parting with his boy at an earlier age, more particularly when it became recognised that a line of cleavage was being drawn between elder and younger boys by the establishment of separate schools for the latter. If this was so, one might say that the thirty years which saw the rise of Preparatory Schools were a period of new ideas, and perhaps one might fairly add that this freshness of view which witnessed their nativity has been assimilated by them and remains their distinct characteristic.

For present purposes it is unnecessary to refer to this subject further than to note that a feeling arose that greater consideration was required in regulating and distributing the hours of the little boy's time-table of lessons; and as a general rule the effect was to shorten their aggregate, and earmark a proportionately larger amount of the day as sacred to outdoor recreation.

Now, it may be accepted as a natural law of school-life that the unoccupied herd degenerates; for whatever may be said in favour of the Preparatory School, its warmest supporters will not contend that it is an institution contemplated by Nature; and, as is usual, when we find it advisable to depart from Nature, difficulties are to be expected. At such an age little boys would naturally be subdivided into their respective home groups, and would be running about with their sisters and brothers just sufficiently under the observation of the parental eye. The herd, artificially collected, must be treated artificially; wholesome recreative occupation must be enforced for all, and if no such games as cricket and football had been in existence, it would have been necessary to invent them or some inferior makeshift.

If this was the origin of the compulsory organised game, it would be misleading to imply that it possesses only so negative a sanction. Games, of course, had existed in our public schools for generations, accidentally so far as the main purpose of school life was concerned, and receiving scant formal recognition from the authorities, but none the less doing invaluable work. It is the spirit that loves these games and in turn is fostered by them, that has made England a dominant nation. To be covetous of

honour, slow to admit defeat, appreciative of discipline, self-reliant, ready of resource, quick to catch an opportunity, prompt to accept responsibility, and, above all, to be willing to sink the personal in the public interest, is to be English-like, or so we fondly imagine; and we pride ourselves on the foreigner's inability to understand the mad Englishman, who finishes his game of bowls within sight of an Armada, or who, while his rivals are hurriedly raising earthworks and sinking rifle-pits, levels himself a cricket ground. We recognise a something behind this seeming boyish inconsequence, and trace a method in the madness, if our English games are the means of developing a side of our faculties which the classroom cannot touch; possibly in mental attainments and trained habits of application, as scholars, mathematicians, and laborious students, we have never as a nation occupied a leading position; all the more reason that without infringing the sovereignty of the classroom we should formally incorporate as part of our school system a ready method of training that half of our capacities wherein our forte lies.

There is a third reason, too, for which these games are welcome, more particularly from the schoolmaster's point of view. Assuming, as we practically may, that he regards the formation of character as his principal work, they provide him with an incomparable field for making himself acquainted with his boys' real selves, for exercising his influence in infusing a manly, unselfish, and courteous spirit, and for fitting them to deal with some social problems of later life which the games portray in miniature. The Preparatory Schoolmaster is a fair representative of the products of our Public Schools and our Universities; whether from a sense of duty, or from inclination, or from both causes, he devotes a large proportion of his leisure hours to intimate association with the boys of his school in their playing field; cap and gown have long ceased to be the inseparable insignia of his office, and most reflecting boys will consider that the lessons which produced the most lasting impression were such as came to them informally, hardly consciously marked at the time, from some one clad in flannels.

It would be unfair to omit the frank statement of a serious drawback which attends the compulsory game, at all events when it asserts its sway without discrimination and without compromise. Its aim and its effect are to produce a type: a very desirable type, may be: bright, wholesome, and English-like, but as uniform as the buttons of the regulation tunic. It provides no encouragement for individuality of taste, no scope for the development of powers of other orders: indeed, it is scornful and intolerant of such. The "heart pregnant with celestial fire" of non-athletic genius is not conducive to alertness at cover-point; the eye that is following the track of some winged insect fails to note the mis-hit, and the ball drops unheeded, or painfully awakens the potential naturalist. Day by day the edges are filed off, and in due time a "mute inglorious" Newton becomes a more or less passable cricketer; the all-embracing net, that is cast for the loafer, strands the genius.

The proportion of boys who suffer in this way may seem insignificant, but it must be remembered that the instances which attract our notice are those of boys who are not naturally athletic; the number is unknown of those in whom there co-exist potentialities of both orders, and the lower, being stimulated, elbows out the higher, which is neglected. In the main the position of the compulsory game must be upheld, but it rests with the authorities to abjure a blind servitude to their own law, and introduce modifications according to their own judgment, and to suit the time-table and the local environment of the school; always discriminating carefully between the two classes of boys who dislike games—namely, those who have higher aspirations and those who have none at all.

There remains the question whether the pains and skill, with which these games are organised and taught, do not serve to place them on too high a level in the estimation of the boys, and thus substitute an athletic supremacy for the old sovereignty of the class-room. If it be true that history has shown us that the nation which sets a higher value on athletic than on intellectual eminence is on a downward grade, it is matter of most serious consequence to allow this tyrant to depose the legitimate king; and the note of warning has not emanated from those alone whose interests are purely intellectual: it has been uttered from time to time by men like Bishop Wordsworth possessing the strongest athletic sympathies*.

To attempt any discussion of such a question is entirely beyond the province of this paper; but one may fairly point out

*At the Wykehamist dinner of 1880 the Bishop said:—"I would ask you to imagine what would have been the condition of our country now—what would have been its rank in the scale of nations as a Divine instrument of progress and civilisation throughout the world—if, ever since the days of William of Wykeham, the same prominence had been given to athletic sports and exercises which we have seen given to them in recent years. For myself I need scarcely say that I am a staunch advocate of such exercises as an indispensable element in all good education. And it is because I value them so highly that I would wish to utter a warning against their abuse. Perhaps, too, as coming from me the warning may carry greater weight, or, at least, may be more readily excused. For no one, I think, can have enjoyed a wider or more pleasurable experience of athletic sports, both at school and college—and, I may add, no one can have derived from them greater or more lasting advantages—than I have done. May I mention some particulars of my experience? When the annual cricket match between Harrow and Eton was first permanently set on foot in 1822, I was in the eleven of that year, and also of '23, '24, and '25. Also in 1825 I played in the first match between Harrow and Winchester, being then captain of the Harrow Eleven. Also in Oxford against Cambridge I played as one of the Oxford Eleven in the first two matches—viz., in 1827 at Lord's, and in 1829 at Oxford; and we won in both. Moreover, I took the principal part in getting up the first Inter-University Boat Race in 1829; and was one of the Oxford Eight, pulling four, with a good Wykehamist before me pulling six—Tom Garnier, son of the late Dean of Winchester, and himself afterwards Dean of Lincoln. In that year (1829) the cricket match and the boat race were both in the same week—the former on Friday at Oxford, and the latter on Wednesday at Henley—and in both we were victorious. This last experience, I suppose, must be quite unique."

that the danger, if it affects the Preparatory School, does so most unnecessarily, inasmuch as it is free from exigencies which affect the Public School. With regard to the latter we hear such criticisms as the following—"We concede all that you say concerning the educational value of school games, but are puzzled by the attitude of the authorities of our schools; they are the official guardians of the intellectual interest, yet we find them stimulating the advance of a formidable rival interest, possessing apparently amply sufficient means of self-propulsion. It is as though a gardener were to forward the growth of a plant, which while endowed with great virtues of its own still trespassed largely upon the beds of his professed products, and sapped their strength. Why should this plant, which elsewhere might be cultivated advantageously, be encouraged in this particular garden?"

The homely answer is that it kills the slugs. For undoubtedly there must exist in every school society a proportion of boys who, owing to barren-headedness or self-indulgent laziness, are devoid of any desirable interest whatever. These aimless, hobbiless, selfish loafers constitute an element of danger which no school can afford to disregard; and the pressure which a powerful athletic enthusiasm exerts directly or indirectly upon boys of this type either forces upon them an interest which is admittedly wholesome and manly, or at least surrounds them with a strong antiseptic atmosphere, that neutralises their power for influencing others. Thus the athletic stimulus is not intended for the athletic boy, who indeed would be better without it, inasmuch as he may be trusted to acquire all the good of our games independently of it; but its aim is allopathic, and its success is greatest when it operates with reasonable moderation over the widest field; its drawbacks commence as soon as it exalts a means into an end, and develops from what is wholesome the poison which comes from excess.

Now, the case of the Preparatory School is different; the large measure of liberty that must necessarily be granted to the public schoolboy in the disposal of his leisure time cannot wisely be conceded to a like degree here, and therefore the conditions which make the mature loafer formidable do not exist in the case of his young brother with similar propensities; moreover, the larger proportion that the school staff bears to the boys provides a ready means for curing such propensities, whether by pitching the offender neck and crop into the scrimmage, or by the exercise of a more sympathetic treatment, for methods are various. For practical purposes we may regard this juvenile loafer as non-existent in any Preparatory School that is worthy of the name: the headmaster is unfettered in framing his ideal; it rests with him to deal with the question of athletic interest entirely on its own merits; he can develop it to an extent that is dominant, equal, or subsidiary to that of the class-room according to the values which he sets on them respectively, and for this he is solely responsible.

As to external pressure, the Public Schools like to get athletes (the Cricketing Entrance Exhibition is not an impossibility in the future), but they want scholars too: it would be interesting to analyse the attitude of parents, if it could be done on a scale sufficiently extensive to be valuable; judging by what one gathers in ordinary conversation, many of them show an indifference to intellectual interests, which would have startled a previous generation, and a section, possibly a small one, would seem purely philathletic. Here are two illustrations:—

A parent anxious to do his best for his boy went to considerable trouble in visiting various Preparatory Schools and personally enquiring into their several merits. He drew up a tabulated schedule, in which the various columns indicated the results of his investigations concerning drainage, aspect, soil, kitchen and sick room management, and such other details as he considered vital, and then submitted these statistics to a friend of mine, inviting his advice. My friend found the information most complete except in one respect: he searched in vain for the slightest record regarding efficiency of teaching.

An acquaintance of mine had recommended to a parent a Preparatory School of all-round excellence. Some months later he received a call from him, and in the course of conversation was informed that a change of school was contemplated: he expressed surprise and hoped that there had been no serious fault to be found with the school. "No, no," was the answer, "the school is all that it should be, but I don't approve of the style of the new cricket master's coaching."

This may sound ridiculous, but it is only fair to introduce a consideration which may to some extent justify the seeming one-sidedness, not on general grounds, but from the point of view of the individual parent.

In my own day it seemed that the aristocracy of the Public School consisted mainly of Sixth Form boys, who apart from their fair claims on the ground of intellectual superiority contributed a preponderating proportion of the cricket and football elevens. It has been pointed out to me that this proportion has steadily lessened, and although I cannot say that I have made any serious attempt to verify the statement, it does seem from the slight data which I have collected, that there are grounds for it; and the following would seem to be the cause. In the old days no boy entered his Public School a ready-made cricketer; there was a fair start for all, and in the race that ensued the clever boy had such advantages as superior brain power may give in the acquisition of skill in games, and also the more material benefits, which owing to his high position on the school-roll he derived in the matter of practice-grounds and cricket-fags. In the present day the excellent coaching which a boy may have received at his Preparatory School, procures for him a start in the race, which he need never lose; for it is the promising young cricketer with a good style who is singled out for further coaching to the exclusion of the untrained. So it has come

about that the aristocracy is no longer the monopoly of the intellectual, a thing not necessarily to be regretted in itself, but incidentally unfortunate as causing a pressure which falls retributively on the Preparatory School that initiated the change.

However this may be, the fact is indisputable that skill in games confers the right of admission to the privileged circle, and it is only reasonable that a parent in his natural desire to secure for his boy a leading position should be alive to the advantages which an early and skilful training in games may be the means of winning for him. Such I believe to be reason sufficient to explain the otherwise unaccountable importance attached to the quality of its cricket-coaching as a determining factor in the selection of a Preparatory School. Yet it would be a mistake to imply that the resulting pressure is either exerted upon, or admitted by, the schools throughout the country, and I repeat that of all headmasters, the headmaster of the Preparatory School is least fettered by this vexed question in framing his ideal. He can view with unqualified pleasure the popularisation of games throughout the country, and the good that it has brought to vast masses of players and spectators among the working classes, for the hum of it need not penetrate his doors. It is a simple matter for him, if he so thinks fit, to exclude the columns of batting averages, the tabulated lists of League matches, and other similar information with which the newspapers cater for the public taste, also the magazine articles which publish the biographies and portraits of athletic celebrities—literature harmless enough if it were not so fatally fascinating in diverting a boy's reading into a most unprofitable channel. Free from the action of such external influences, he can control the current of athletic enthusiasm, and regulate its flow according to his own judgment; and such criticism as may be passed upon his management is unsound if it assumes either of the following propositions to be necessarily true, namely, that a high intellectual standard indicates low athletic proficiency, or that moderate athletic attainments imply that the full benefits derivable from school games have not been amply secured.

I have been asked to give an account of the compulsory games and other organised forms of outdoor exercise as conducted at a Preparatory School of some fifty boys, of which I was headmaster for eighteen years; and I may commence by saying that they occupied the interval between dinner-time and tea-time throughout the year. Deducting the time that was consumed by the necessary double change of dress (for our boys invariably wore flannels for all games) the duration of the interval amounted to about two hours in the summer term and somewhat less in the winter. The responsibility for the management of the games rested with the master who happened to be on "field duty" for the day; others would lend their help to such extent as their zeal or inclination moved them; and I may say in passing that a man, who from distaste for such occupation or from inability to render any efficient help in the common out-of-school life takes the smallest possible share in it, must be possessed of

unusual capacities for the in-school life to render him a welcome member of the Preparatory School staff.

Its compulsoriness did not debar a master from taking away from any ordinary game for an expedition into the country a party of boys equipped with cameras, cycles, fishing-rods, etc., and I frequently did so myself. It is fair, however, to say in this connection that, apart from their value in fostering a love of the country, these expeditions were attended with results which a naturalist would regard as insignificant, and that the narrowness of the range of my own information was largely to blame for this; also, that the only attempt which I ever made to introduce an organised system, which would include the generality of the boys, proved similarly unproductive.

The monotony of the compulsory game was mitigated in summer months by several school-picnics, but I do not think that the boys as a rule felt this monotony; certainly at these very picnics I used to notice that some twenty or thirty of them would soon tire of Nature's charms, and would hew themselves rough bats from a neighbouring coppice and pile peat-clods for wickets, and with a ball which some prescient comrade would produce from his pocket, the young barbarians would organise for themselves a game of cricket, wholly regardless of the varied attractions of some of the most beautiful glen, stream, and moor scenery in this country. During the winter months there was less scope for the variety which such expeditions and picnics afforded, but, to break the monotony of compulsory football, an element of change was introduced by another form of compulsion, namely, the climate of our district, which in some seasons would close our football-ground for weeks together. Fortunately there were hills with every gradation of slope within a few minutes' walk, and according to the state of the snow we could select suitable tobogganing ground. The sport is one that requires careful supervision, for otherwise the delights of the descent are not without attendant risk; but there is nothing healthier than the uphill trudge whereby those delights are purchased. I know of no readier cure for the epidemic cough which will sometimes fill a school sick-room at this season.

There is an idea, far less prevalent than it was, that the element of danger is inseparable from all school-games, and a consequent hesitation on the part of some parents to let the young and delicate take part in them. I remember an appeal from a pathetic mother, who had attended a great Rugby football match a few days previously, and, horror-stricken, had bidden her coachman drive off the ground after a brief view of it that had proved more than sufficient.

Such apprehensions, so reasonable, *à priori*, can only be met by an appeal to experience. During a course of eighteen years our accidents were few and trifling in their nature; certainly no bone was broken in any game. On the other hand, we had at least three bone-fractures at those vastly more dangerous times when boys were "doing nothing"; and I am confident that a

little boy is as safe in the thick of a football scrimmage as in the ordinary occupations of his home life. He is also less liable to other forms of harm. If he is overtaking his strength, the concomitant falling off in his play cannot fail to attract notice; nothing will stop his catching an occasional chill, but he is least liable to this when his general health has been fortified by regular exercise in all weathers and when he is properly clothed in flannels. In this connection I may mention a hint which I received from the late Sir George Macleod, M.D.: "In bitter weather let your boys wear a second skin of clothing under their football jerseys, etc.; no matter how thin this second skin may be, its protective power is invaluable." It may be accepted as a fact, however, that all Preparatory School authorities exercise the greatest care in such matters; their lives would be intolerable otherwise.

It is curious to think how very few good school games exist. A genius inventive in such a direction might draw up rules for a hundred new games, which would seem to fulfil the necessary conditions, yet ninety-nine of these would probably prove misfits, owing to some unsuspected method of eluding the rules, some want of balance between the forces of attack and defence, or some defect in nicety of adjustment between the elements of chance and skill, drawbacks which the test of experience would soon reveal. Cricket and football have not been invented: they have grown; they are admirable as games, and they are admirable incidentally as providing lessons in patience, discipline, emulation, dash, nerve, unselfishness, and *esprit de corps*. One would fain believe that their attractions for English boys would be sufficient to ensure a loyal love of them for their own sakes without further stimulus. Perhaps it was their golden age when they were so played; when victory was earnestly struggled for, but soon forgotten, when results were unregistered, and the game was its own reward. There was a sufficiency of skill, and it was the light-hearted, brilliant skill of the amateur rather than the anxious, methodical, but more efficacious skill of the professional. Yet sentiment must yield to utility, for this ideal game ceased to be practicable, when the compulsory game began to include that considerable percentage of boys who are not typically English in their tastes. The game is not worth the playing when its interest is half-hearted and desultory; and if, in one sense, it has been degraded by the registration and deification of the result, it has gained more than it has lost by the general interest which the stimulus of competition introduces.

Whether it is wise to carry this stimulus so far as to allow the inter Preparatory School match, may be a doubtful point. As a matter of fact such matches are almost universally allowed, and if attacks can be with justice levelled at the Preparatory School of the present day on the score of excessive athletic interest, we need look no further for the cause. Such matches are most useful in encouraging an interest in games, where it shows signs of flagging, and if no great fuss is made about the occasions on

which they are played, and no great stress is laid upon their results, they may be entirely useful. But it is not easy to ensure such moderation. We masters are often the greatest sinners ourselves; not merely from that interest in sport, which is common enough among us, but also from patriotic school-feeling, an ounce of which is apt to outweigh a ton of abstract theory. I fully admit that I could not endure to see my boys (no matter how creditable their standard of proficiency) beaten by other schools without feeling and acting as though a serious reproach had to be removed. A boy notices such things, and the greater his regard for his master, the more likely that his sense of proportion regarding the relative importance of the two sides of his school life will be warped at an age when he is most impressionable.

Moreover, I think that it is to these matches that we owe the introduction of two personages, with whom the idea of recreative pastime seems incongruous, viz., the cricket professional and the juvenile cricketing phenomenon. The former I have never met in a Preparatory School, but there is a growing tendency to employ him; of the latter it goes against the grain to speak disparagingly, he is so admirable in his way: his pose is easy, his style graceful, his strokes varied, effective, yet apparently effortless, his knowledge of the game covers all that is worth the learning; he reminds one of the little Japanese pellets which the conjuror tosses into a glass of water, and which forthwith, under its simple action, assume the proportions of pictures visible to the eye; the boy's form is already shaped, all that he requires is the expansion which time alone can give to his bones and muscles, and he will stand before the world a finished masterpiece. It is a treat to see him, yet I doubt whether this triumph of skilled and painstaking coaching is not a splendid mistake; it is possible that a painful excellence may cost the game some of its light-hearted brightness, and that its essential recreative virtues may be lost, if it is converted into a business and a most absorbing one. *Ars longa, vita brevis*. Any such high standard seems unnecessary. As one of some hundreds of spectators I have watched a little boys' school-match, in which the play was excellent, perhaps monotonously correct. As an almost solitary visitor I have witnessed another, in which an observance of the cardinal principles of the art of batting did not interfere with the exhibition of some unorthodox individualities, and the half-volley was shamelessly lifted. Of the two types, the latter seemed to accord more nearly with one's idea of what a Preparatory School match should be, and I believe that it is the fairer representation of existing custom.

At all events, it would be unreasonable to decry the use of the inter-Preparatory School match in general; to dispense with it is to submit to the onus of keeping athletic interest up to a proper and irreducible level; to admit it is to incur the obligation of guarding against some of its natural effects; of these alternatives the former is that which would present the lesser difficulty to myself in

steering between the Scylla of slackness and the Charybdis of over-tension. During my eighteen years our boys never once played a match against a school of the same class. There was nothing marked in such abstention, for the distances by which we were separated rendered such matches otherwise undesirable; but at all events we did without them, and I believe that we lost little in consequence. On the other hand, our boys used to play twice or thrice annually against scratch elevens from larger schools, games which carried a sufficiency of interest with little importance attaching to their results; and they saw something of grown-up play, as the local cricket and football clubs used to play their matches on our ground. We had a system of inter-dormitory matches too, which excited a good deal of interest; at the beginning of each term I took pains to arrange the dormitories so that the four groups of boys should be of equal athletic strength, and during its course these groups met one another twice; none of us masters interfered in these matches, which were keenly contested, and capitally managed by the dormitory captains; they were fully appreciated too by the contingent of tiny boys, who thus attained the temporary dignity of playing in "first-class" games.

CRICKET.

For cricket our boys were divided into three games according to their proficiency, an arrangement which held good for ordinary purposes, but which gave way to such home matches as were constantly introduced for the sake of giving variety. The lowest game consisted of tyros with the possible admixture of two or three old stagers, whose skill had not kept pace with their experience. The number of boys in this game varied according to the month. At the beginning of a summer term there would be a dozen or more; but as immediate promotion was secured by a humble measure of competence, the numbers dwindled to the ideal figure of eight—two to bat, two to bowl, two to field, and two to umpire. In this game the novice learnt to obey his captain, and to respect, or at all events to abide by, the decision of the umpire. The latter feat required an effort of will that was invaluable to his future career as a cricketer and as a man. Sometimes the strain would be too great. "Please, sir," a plaintive voice would plead, "need I go out?" The umpire first called 'wide,' and then gave me out 'l.b.w.'" Such situations, worthy of a cyropædia for their novelty and complexity, were of every day occurrence. No law-maker's ingenuity could have anticipated them, no judicial acumen could satisfactorily solve them. However, it was a happy little game, and full of event as soon as bat and ball had learnt to meet. To facilitate this end, the wickets were pitched sixteen yards apart, a range which gave the batsman a fairer prospect of reaching the ball, and at the same time imparted to the bowling the only deadliness that it possessed. A passing master would give an occasional hint, and before many weeks had gone by the quick eye and ready hand would qualify its owner for promotion into the middle game.

There were eighteen or twenty boys here. Their runs received the dignity of being registered in a scoring book; I have even seen telegraph figures employed. A master would frequently umpire for them, and occasionally take part in the game himself; but there was no profession of serious coaching here, and little attempt at style; they learnt to catch, and to throw, and to hit. Bowling talent, too, was first developed in this game, and the use of pads adopted. The position of the fields was studied in relation to the bowler's peculiarities, and a boy learnt to stand finer, deeper or squarer, according to the captain's directions, and gradually became acquainted with all the nomenclature of the game. The distance between the wickets was twenty yards.

The upper game consisted of the twenty best cricketers, and, as a rule, two of the masters played with them, taking their innings after most of the wickets had fallen, or else limiting their own scores to twenty runs or so. A master acted as captain of his side, but in his absence a boy filled the position quite satisfactorily; indeed, we experienced no difficulty on this score, and all three games, after being once started, could proceed in full swing without any directions from masters.

The distance between the wickets was twenty-one yards, which I regard as the outside limit that a young boy can comfortably command without risk of over-bowling himself. We used the undersized ball, which Mr. Wisden specially introduced to meet the wishes of Preparatory Schools, which some of us had expressed to him. The pitch was rolled between the innings by the incoming side, and the umpires were the two boys whose names stood next on the list of incoming batsmen. A practice-net gave employment for the boys who were not fielding, and frequently a master would coach them there. We employed no professional, but I confess that he would have been of service at this net as an animated catapult. For it might be that one was endeavouring to show a boy how to play a particular kind of ball, and had invited the bowlers to deliver such a ball for the purpose of illustrating the method. It was provoking that in spite of their best efforts every conceivable variety of ball would be delivered except the one particularly wished for; but for every other reason I was glad to dispense with professional aid. I should add that there was a practice-net ready at all intervals between school work, and that a master who was ready to coach, experienced no lack of voluntary learners.

I may mention here a plan which I occasionally adopted, and which possessed the advantage of economising time. I placed eight or ten boys in a line with their right feet just inside an imaginary continuous popping-crease. Standing in front of this line, and facing them, I talked concerning the curve, pitch and spin of the ball, and about forward and back play as applied to the ball that was straight or off the wicket on either side. I illustrated, as best I could, with a bat which I held, and made a point of inviting them to give the reasons for each stroke. After a while I described to them the nature of a ball which they were

to imagine themselves about to receive, and giving them a moment to think the matter out, shouted "Play," and each boy simultaneously went through the movement which he considered appropriate to the occasion. A ridiculous diversity would mark their earlier judgments, but before long I could count on a fairly correct uniformity both in the method of making a stroke, and in the reasons which would be assigned for it. We got a good deal into the time thus spent, and it was a means of leading them to bring their intelligence to bear upon the game instead of playing it mechanically.

I may fairly say that our upper boys acquired a very respectable style; they were not intimate with the subtle strokes which in the present day add a refinement to the game, but they understood the theory pretty well, and tried to make themselves sound on the essential points; they fielded creditably, and were regularly practised in long-distance catches. Several of them subsequently figured in their Public School Elevens. I think that I may say, too, that they played in the proper spirit, and that the general feeling would not tolerate selfishness and ill-temper. I am disposed to differ from the opinion of those who hold that a very high standard of excellence is necessary if its full benefit is to be derived from a game. My own view is that this is entirely dependent upon the personal interest which the masters take in this most important field of work; and that the spirit in which games are played in the Preparatory Schools of the present day is excellent, *because* the boys through their masters inherit the best traditions of the Public Schools and Universities.

FOOTBALL.

Although this game admits of skill of a very high order, I think that it possesses a very distinct advantage over cricket in that this skill can be acquired more rapidly and more generally, and is dependent upon practice more than upon skilled teaching or exceptional capacity. It is noticeable that in Scotland, where the leisured class is smaller, little or no advance is made or likely to be made in cricket, except at the schools, where it flourishes as it does in England. The average man is too busy to spare time for the three days' match, he is too busy to enter upon the long period of pupilage that is necessary for even moderate success. On the other hand, a football club need only be started in a village to ensure for itself almost certain success. Again, the following may be a suggestive consideration. The Public Schools in Scotland play inter-school Rugby football matches; the enthusiasm is intense, and these schools are the regular feeders of the Scottish fifteen, which more than holds its own in International matches. But in England from various causes the inter-school football match is a far less important feature; the interest in the game is accordingly less white hot, and the standard of skill lower; indeed, I am told that the English fifteen borrows from the products of the Scottish Public Schools. I do not call attention to this in any spirit of

regret; on the contrary, it would seem a fair inference that the attacks which may with possible justice be made upon our English school cricket on the score of wasted time and absorbing enthusiasm, cannot with any fairness be levelled at our school football, which is an unmitigated boon: the most exacting supporter of the intellectual interest cannot grudge the moderate portion of the unpleasant winter day, which it wholesomely occupies, nor the reasonable, but perfectly adequate, degree of interest which it excites under present circumstances.

Concerning the comparative merits of the two main codes of rules it is difficult to decide. If we look to their effects on the physical development of a boy's frame, there is a contrast. The Rugby scrimmage produces the muscle-clad shoulders and back, and a lusty leg-power; the Association game encourages a quickness and accuracy of eye, and converts the legs into limbs that are as clever as the hands, lacking only prehensile qualities. A full-blooded vigorous dash characterises the former game, a wiry untiring activity the latter; it is the contrast between the forcible muscularity of a bulldog or a Sir Kenneth, and the hardy nimbleness of a deerhound or a Saladin. Both games furnish equally a field for the exercise of manliness, endurance, and unselfishness; their skill and attractions are fairly balanced, though perhaps it may be noticed that the Rugby player who attempts the Association code is almost always a failure, while the Association player, who seriously tries the Rugby game, not unfrequently becomes a convert.

For my own part I adopted the Association rules on the ground that the game is less discouraging for a beginner, or was so twenty years ago. The Rugby scrimmage, into which he was launched, was a trying ordeal for a little boy's first experiences, and he got more kicks than credit; under the Association rules the rewards and punishments are more evenly distributed, each place in the field is of equal importance, and there is recognition for the tyro's efforts, however humble. I thought, too, that its courage was of a self-controlled rather than a ferocious order, but I doubt whether these points are of any substantial importance. Both games are excellent, and I am not sure that the Eton game, which keeps the players all on the move, is not as good as either.

Our game lasted from three to four o'clock; during the previous hour a choice of occupations within certain limits was allowed, but the majority of the boys would practise shots at goal. As in cricket they were divided into three games, and the masters constantly took a personal part in them; the value of their help was fully appreciated by the boys, who, as far as I can remember, never suffered any kind of injury from collisions with the grown-up men, whom they charged fearlessly; from them they learnt the importance of alertness in order to be in the right position at the right moment, and all the clever manœuvres that depend upon accurate and unselfish co-operation. In all ordinary games we had to dispense with umpires, leaving the

captains to settle the general doubtful points and relying upon the individual player to "own up" in cases of "fouls" or other points of detail; his word was unquestionably accepted and the trust most rarely abused. I wish we could have dispensed with the goalkeeper, too—his limited and invariably muddy range is the weak spot in the game; but after testing methods that aimed at his abolition we had to admit that he was a regrettable but necessary feature, and could only arrange that the post should be held in reliefs. In general I may say that we suffered from no lack of interest in football, and did not find it necessary to fall back upon hockey, a game of which I know little, but which seems to possess no points of superiority over football, and to be valuable solely as a variety.

ATHLETIC SPORTS.

It was somewhat against my own prejudices that I came to the conclusion that athletic sports were out of place in the Preparatory School. Boys in ordinary course will try with one another how high or how far they can jump; quick running is necessarily an important feature in their games; as a specially-developed accomplishment, and associated as such with rewards for excellence, I think that it has several drawbacks in the case of young boys.

(a) Of the athlete (in the narrow sense of the word), it may be said with general truth, *Nascitur, non fit*. Some boys are born with a set of leg muscles, which, with little or no practice, will qualify them to rank as athletes; in others these muscles exist in minor strength, but sufficiently to repay culture; but the large majority are foredoomed to failure. Possibly the very weight of a sturdy back or well-covered arms may be the cause of their undoing; no amount of pains can ever bring them within the ring of successful runners. I do not think that it is fair or wise to press this majority to train and practise in a field where success is hopeless, and their only rôle is to ultimately pose as vanquished rivals behind the victor's car.

(b) The sports fail to fulfil the first object of the school game. The individual works by himself, and for his own hand. They introduce the bugbear of athletic hero-worship in its most profitless form. The born athlete will in due time reap his harvest at the Public School, University, and elsewhere; is it desirable to lengthen that harvest season, and add to the tale of tankards, that will in any case more than adequately herald their winner's prowess?

(c) Taking the physical point of view, if we desire to develop the body's capacities to the highest possible pitch of excellence, it is not clear that we are consulting its best interests in submitting it to a strain that may be premature. In the racing world it is recognised that the most promising animals may be ruined by running as two-year-olds, and it is a question whether a boy of twelve years is relatively as far developed as a two-year-old colt. There is only one way of dealing properly with a race,

namely, to calculate to a nicety the extent of one's powers, and expend them with such judgment as will leave no surplus at the moment when the tape is breasted. A boy should be taught to do this (and the tax would seem unfair), or else he should not be taught at all.

It is right to say that these objections are met to some extent by the careful consideration of those who allow athletic sports in their schools. The tankard, the intrinsic uselessness of which served only to invite attention to its inscription, is disappearing, handicap-races (a poor form of sport) are common, and the distance of the longest race is usually cut down to a low limit. The question then arises whether this is not a drawing-room athleticism, which has shed its charms when shorn of its virility; whether it is worth while to retain this shadow, except on the ground that the "Sports Day" provides the occasion for a pleasant meeting of the parents and friends of the boys.

PAPER CHASES.

The paper-chase has claims as a pleasant variety of out-door exercise; on a small scale it reproduces the pleasures of the hunt. There is the charm of encountering natural obstacles, the interest of following a trail that is fair and yet intended to baffle, the excitement regarding the unknown proximity of the hares, and the delight of the view-holloa; even the licence in the matter of mud-stains is highly prized by some. It is well worth an occasional trial, provided that it is closely supervised (for its risks are real), but its charms will not stand the test of its frequent repetition; nor indeed will the farmer, whose good-natured acquiescence must be economically husbanded. Having once realised the connection between shreds of Latin exercises on the one hand, and broken fences, trampled young corn, and startled ewes on the other, he takes care to draw a strict line of exclusion round his property. Thus it almost invariably comes about that the paper-chase is relegated to high roads and public paths; the hares are deprived of any scope for originality, and apart from the resulting dulness there is the further drawback that the pace of the chase is most undesirably accelerated in the absence of natural checks; while the introduction of artificial and obligatory checks robs it of the last remaining touch of imagination.

WET-DAY RUNS.

If exercise in the fresh air is a daily need, I know of no valid excuse for omitting to insist upon it in all weathers. Boys do not hibernate because the rain is falling; as at other times, they take their meals, employ their brains, and suffer if the proper and natural complement is omitted. We had a regular two-mile course to meet this need; after changing into their flannels the boys started in a pre-arranged order, the weaker getting a few minutes' start of the stronger. At least two of us masters accompanied them, one in the van to prevent the procession degenerating into a race, and one in the rear to ensure the

requisite minimum of pace, namely, a jog-trot varied by intervals of brisk walking. In about twenty-five minutes all were home again, and a quarter of an hour later a call-over found them changed into their ordinary clothes. To this institution I experienced some opposition on the part of parents, and exempted those boys whom a medical certificate, or my own judgment on any particular occasion, pronounced unfit; but I never experienced the least cause for considering that any danger to health attached to the system. Some extra work fell upon the servants who dried the flannels; we masters undertook our share cheerfully, recognising also beneficial results to our own health and tempers, and the boys were not consulted. A bright glowing face however cannot look very sullenly on its cause.

GOLF.

It would seem that this game can hardly be included among the organised games of the Preparatory School; it is admirably suited for holiday life, and Paterfamilias may wisely regard the propinquity of golf links as a very strong recommendation when he is selecting the seaside resort for the summer vacation. It is admissible at the Public School, where the liberty of the individual boy limits the action of the compulsory game; but it fails in meeting the first requisite of the real school game, as the individual plays for his own hand, and not for his side. The very attractions which it admittedly possesses are a serious drawback, if they tend to lessen the interest in the more desirable games, to which it acts as a rival rather than a foil. Like lawn tennis, it must be remorselessly excluded during the hours of compulsory recreation. Within a very limited area it may have its use; it frequently happens that there are boys temporarily incapacitated from taking part in the regular school game, and for such it is not easy to find interesting occupation in the open air. The injured toe or barked shin, which requires a rest from football, need be no bar to a round of golf; at all events I felt the difficulty arising from such cases of enforced idleness, and in the absence of any proper golf links in the immediate neighbourhood we laid down in our playing field a set of nine putting-greens about thirty yards apart, where the limpers might make their approaches and negotiate their stymies without harm to themselves or to their comrades.

CYCLING.

It is hardly necessary to utter the condemnation of the cycle as a means of providing the recognised recreation for boys in a Preparatory School. It is open to the objections which make golf inadmissible, and it carries with it serious risks of its own. For a single sensible boy it may be a harmless but colourless recreation; but he does not care to ride alone; for a batch of little boys, to whom inexperience means recklessness, it may possess dangers that are tenfold those of all regular games combined. Their notion of cycling may be to coast abreast down the

steep hill, scorch along the flat, and pant up the rising ground; the bone fracture and the strain are not the accidents but the calculable incidents of such sport. No party of little boys should be allowed to ride unsupervised; and yet in guarding against such risks, one eliminates such charms as the pastime possesses for them.

But the cycle, too, may have its place. The weakest spot in our Preparatory School system is its "grooviness"; the ever-recurring school game allows the boys no opportunity for acquiring a knowledge of Nature, of things and places that lie outside the hedge that bounds the school playing field; under existing conditions such knowledge must be acquired during the holidays or not at all.

Again there is the percentage of boys to whom the fascinations of the school game do not appeal very strongly, and it is fair to remember that these may have potentialities for interests of another order, and to cater for them to an extent which is reasonable. Moreover, it may be assumed that in the staff of masters there is at least one whose interest in the games is artificial, and prompted only by his general enthusiasm; such practical help as he may endeavour to give in that department is necessarily slight when compared with that which he might be counted upon to render in a field possessing an interest more congenial to him. Of botany, natural history, physiography, photography, architecture, etc., the average schoolboy knows next to nothing, and it is regrettable that the possibility of developing interests in such should be excluded from his young life by rigid uniformity of groove. It seems desirable that upon one day in the week there should be allowed an option (of which only too few would avail themselves when once the novelty had passed), and that an excursion should be made into the country under the direction of the master who has extramural hobbies. The exact object of the expedition would depend upon the nature of his predilections, and also upon the local environment of the school; but it may be safely assumed that none is so unfortunately situated as to possess no suitable field of operations. Before long the interesting ground within walking distance will have become exhausted, and it is at this point that the real use of the bicycle comes in. It doubles the radius of range, and brings within reach the abbey, watershed, spinney, marsh, or quarry that lie beyond the compass of pedestrians.

SWIMMING.

If the swimming bath is not to be regarded as an indispensable part of the equipment of a Preparatory School, it is at least the first of its desirable adjuncts. Accident may place the most cautiously prudent of us in a position wherein the ability to swim for a few yards may make the difference between life and death; and it is not merely the one life that is at stake; another, the inferentially more valuable life of the would-be rescuer, may go down, clogged in the clutch of the inexcusably incapable.

For this latter reason the obligation of acquiring reasonable competence in swimming should be imposed by society on the individual, in the same way as it insists upon vaccination, but without a conscience clause. There is no advantage to be gained by deferring the duty, for the child possesses as much aptitude as the adult.

Although the heated swimming bath is not a necessary condition for learning, it must be remembered that it is not every school that lies within easy reach of river or sea, and that these at best are available during only a limited portion of the year. The question of temperature, too, comes in as a factor that is important to learners in another way; for water that has been heated allows the swimming lesson to be protracted, an advantage to which no teacher can be blind. A still more important consideration is that the river, as a rule, is either sluggish with a muddy bottom or rapid in its current; in neither case can the element of anxiety be absent from the person in charge of a party of young bathers, any one of whom may be swept out of his depth, or disappear under water that loses its transparency as soon as the mud is stirred; and to such risks sea bathers are almost equally liable. A well managed swimming-bath is absolutely safe, it promotes health during the greater portion of the year, and it provides delights of which boys never tire, thus adding to the resources at the disposal of the master in providing occupation for boys on wet afternoons, and also, may be, on Sundays.

The question of expense and also of water supply will decide the size of the bath. My own was 21 ft. by 15 ft., and proved adequate for ten bathers at a time; its minimum depth was 4½ ft., which practically meant that it was available only for boys who could swim; thus the risk that a non-swimmer might get out of his depth was eliminated, a very important matter when several boys are splashing about together.

Its sides and floor were lined with cement, and the latter was covered with white glazed tiles, which reflected the light and thus rendered it difficult for a swimmer to get into trouble unobserved. A marginal path ran round the bath, whence it was easy to command the whole area with an eight-foot pole. A large saddle-back boiler received the water that was conveyed to it by a pipe leading from an outlet at the bottom of the deeper end, and automatically returned it in a heated condition by another pipe that had its inlet near the surface of the shallower end. The whole volume of water could thus be raised to a temperature of 65 or 70 Fah. within twenty-four hours, and the heat of the furnace could then be reduced. The superstructure was of wood (double, with felt lining) and in the roof were skylights for ventilation. The whole original cost, as far as I remember, did not exceed £150, and the expenses of up-keep were very moderate. It will be understood that this sum did not include any provision for dressing-rooms, etc., and that the erection, being severely plain in appearance, was unsuited for any

but a retired position among the school-buildings. It answered its purpose, however, admirably, and I never regretted the moderate outlay, though I think that its length might advantageously have been increased. The water was changed once in a fortnight, if only for the reason that the pipes of the heating apparatus introduced a sediment which, though otherwise insignificant, robbed it of the transparency that is desirable for perfect security.

I cannot remember any kind of mishap affecting a boy's health for which this bath was responsible. Certain rules had to be observed.

- i. There was no bathing without authorised supervision.
- ii. No boy was allowed to bathe within at least an hour of any meal, or oftener than five times in seven days.
- iii. A boy's stay in the water was limited to ten minutes, or less if the water happened to be below its normal temperature.
- iv. Boys were made to dry themselves, especially their heads, without hurry.
- v. "Ducking" was prohibited.
- vi. Non-swimmers were not allowed to enter the bath except for their swimming lessons.
- vii. The bath was closed between Nov. 15 and March 15.

In my own opinion separate dressing-rooms are unnecessary. Our boys dressed in a large play-room, which immediately adjoined the bath, and I unhesitatingly advocate such publicity for young boys. The decency of the clad or the secluded is negative, that of the unashamedly naked is positive. This bath was rather a hobby of my own, and I usually spent half an hour there daily, helping with the swimming. Several of the boys' fathers from time to time would join me there. But neither their presence nor my own seemed to impose the slightest constraint upon the boys, who would chat with us as unconcernedly in their garb of nature as they did in their ordinary attire.

Although possessed of only slight aquatic skill, I taught the swimming myself. A professional teacher would have done it more rapidly, if this had been a great object; but the lesson provides one of those opportunities of out-of-school life wherein a boy may be led to raise himself. Not the fearless boy, naturally so constituted; to him the teacher is valuable, mainly, as a life-preserver; he would swim untaught within half an hour, if he did not drown himself first. But some boys are physically cowards, and others have a nervous shrinking from water, though plucky enough in other ways, a peculiarity which often runs in families. All these require careful handling, and it is very much better to draw them on to make their own efforts than to treat them with a mechanical compulsion.

I kept a fairly large (3 ft. by 2 ft.) ordinary bath cork, and upon this the beginner was induced to launch himself with his chest resting upon its centre, his hands grasping the two front corners, his chin midway between them, and his legs trailing straight behind; a forward motion was imparted to the cork by means of the pole, which I held; in this position the cork, apart from its intrinsic lightness of substance, acquired a secondary buoyancy as an inclined plane, but lost it again when stationary. As soon as his initial fears had subsided, the boy learnt to impart a propulsive power by the frog-like movement of his legs, and then the services of the pole could be dispensed with; as he gained confidence, the speed and buoyancy were increased, and sooner or later he gaily careered with a full leg-grip of the water. When once this had been acquired, the main difficulty had been overcome, and a cork-jacket, or a halter supported by a pole, soon enabled him to attain the knack of using his hands properly.

This may seem trivial, but I have mentioned it because it is a method by which any inexperienced person can teach a boy to swim, and also because its steps are gradual, each making a reasonable demand upon the boy's will, strengthening his pluck without over-taxing it.

Once a swimmer, always a swimmer, usually a water lover. The other accomplishments follow in due course. The header (swimmers should not be allowed to enter the water feet foremost) has its early terrors, but they are more easily overcome. Then there are the innumerable varieties of fancy swimming, and swimming under water, and in the end that cool precision and gracefulness of movement in the new element which is denied to the mere earth-treader. Most of our boys reached this stage, and all who were not exempted by medical certificate learnt to swim. It is unnecessary to emphasise the value of such a result, but I may mention an instance in which it was somewhat pointedly brought home to us. Before he came to school, one of our boys, while bathing in the sea, had been carried out of his depth, and only rescued from drowning by a brave lady, who lost her life in saving his. By something more than a coincidence, the same boy now holds the R.H.S. Certificate for saving a comrade's life at his public school: he has been able to make an indirect repayment of his debt.

A. J. C. DOWDING.

APPENDIX.

SUMMARY OF REPLIES TO QUESTIONS.

Question 1.

Do you experience any opposition to compulsory games on the part of parents?

94	contributors	reply	-	-	-	-	-	-	None.
28	"	"	-	-	-	-	-	-	Slight.
2	"	"	-	-	-	-	-	-	Some.

The opposition which comes from parents of delicate boys is often reasonable, and is yielded to at once if supported by medical authority. Unreasonable opposition is very rare, and is described as coming mainly from those who fail to see the motive of these games, the parents of day-boys, and the faddists.

Question 2.

According to your experience, what fraction would represent a single boy's annual risk of serious accident (such as the breakage of a bone) arising from compulsory games?

67 say there is no risk whatever.

51 say the risk is infinitesimal, or represent it by a fraction varying between $\frac{1}{100}$ and $\frac{1}{10000}$.

1 represents it by the fraction $\frac{1}{2}$.

Of the contributors who, in their experience, have been free from such accidents, thirty-six have mentioned the duration of that experience. From these data it would appear that an ever-juvenile Tithonus might reside in his Preparatory School for upwards of one hundred and sixty-nine centuries enjoying immunity from bone-breakage in the compulsory games.

Question 3.

Similarly, what fraction would fairly represent his risk of other harm (such as serious illness) that could be fairly attributed to the compulsory game?

74 reply that there is no risk.

35 reply that the risk is infinitesimal.

Several emphasise the importance of careful supervision of the games; also the necessity for exempting all boys whom, owing to special delicacy, the school doctor judges unfit for them. Many point to the beneficial effects of the regular games upon the general health of the boys. On the whole, the risk of serious harm or illness is regarded as even less than that of accident under existing conditions.

The replies which have been given to Questions 1, 2, and 3 are such as would be expected by those who are familiar with the methods of Preparatory Schools and the confidence which parents feel in them. For the benefit of a wider circle, they put on record an overwhelming testimony that manly games may be played vigorously and yet safely by little boys, and that the risk of serious illness, which might seem to threaten when these little boys, thoughtless and apparently lightly-clad, are exposed day after day in large groups to the influence of the fogs, cold and east winds of autumn, winter, and spring, is small enough to be negligible.

Question 4.

"The compulsoriness of games should be modified in favour of individual boys possessing pronounced tastes of an open-air but non-athletic order with a view to their development."

(a) 41 agree with this view.

60 do not.

(b) 15 adopt it in practice (to the extent of one day in the week).

49 do not.

It would appear that some of the contributors have understood the "modification" to imply total exemption; otherwise it would be difficult to account for the stress which in this connection is laid upon the value of games as a physical necessity for health, a social training, and an invaluable discipline. We should all agree in this estimate, but it would be straining matters rather far to declare that a boy who has enjoyed these advantages on five week-days may not be allowed an alternative on the sixth.

The majority do not approve of any modification, and their reasons, so far as they were given, may be put under the following heads:—

- (i.) Boys of the type described are very rare.
- (ii.) General arrangements cannot be ruled by the needs of a small minority. No boy ought to feel that he is "special"; they are too young to have their whims indulged.
- (iii.) Such opportunities should not be given in the Preparatory School, but found in holiday life or in the Public School.
- (iv.) The inevitable effect would be to encourage "loafing."
- (v.) Any initial disinclination for games may be overcome in a natural way by gradually exciting interest in them.

Perhaps I may quote the remarks which in one paper were very distinctly expressed:—

"I think that boys' amusements at school should all be more or less of a disciplinary character, *i.e.*, tending to inculcate habits of self-control, unselfishness, etc. I impress on my boys that as they spend about one-third of the year at home, they should make a point of taking up some hobby, such as botany, natural history, chemistry, or photography. My experience is that boys without a natural taste for games derive great benefit from the effort to acquire it, and they generally succeed, and never consider it a hardship to have to do what others do. There is nothing so fatal to the morale of a school as 'loafing,' and my belief is that off-days ostensibly spent in 'bug-hunting,' botanising, etc., invariably in the case of the great majority of boys lead to this objectionable habit."

On the other hand, a considerable minority is in favour of the modification suggested; yet several who approve of the theory declare that it is impossible to put it into practice to the extent indicated in (b).

Many prefer to set apart an afternoon, say once in a week, on which the organised game is altogether suspended, and all the boys are sent on a country walk; some would give a choice of occupation on such days; some give an occasional off-day, on which a picnic or expedition takes place; some utilise the Sunday walk, or the odds and ends of time that occur during the ordinary course of the school day.

In fact, the question has led to the expression of views of great diversity, and an element of truth must be recognised in all the evidence in spite of its occasional contradictoriness.

It may serve to clear the way if I endeavour to put forward the view, which I gather to be that of the small minority, who both theoretically and practically approve of specially encouraging the boy of worthy but non-athletic out-door tastes.

- (1) The boy described is not so rare as may be supposed; we have positive evidence to the contrary. "Not a few boys," says one contributor, "who are fond of natural history and prefer to devote their half-holidays to collecting or going on geological expeditions, turn out good scientists." In any case, we ought to aim at preserving the type, lest neglect should lead to its extinction.
- (2) It is not fair to say that a boy in the Preparatory School stage is too young to have his tastes indulged; the real risk is that, if we fail to catch him young, we may not catch him at all. The thorns of athletic interests spring up and choke his early tastes as soon as he has overcome his initial disinclination for games.
- (3) Experience tells us that we rely upon a broken reed if we trust to holiday life for the development of such tastes.

- (4) The difficulty is not overcome by sending all the boys for country walks, which to the majority are most distasteful. The remedy is worse than the disease, as these walks are a direct encouragement of "loafing," and possess little value for the few boys in whose interests they are introduced. The latter require the stimulating help of an interested master, and the enforced presence of an uninterested crowd is as fatal as the introduction of a mob of "non-musicals" would be to the efficiency of the singing-master's lesson.
- (5) The loafer is an abomination; he must be hunted, but the playing field is the proper place for the chase.

I do not see that the interests of the organised game are threatened if on one day in the week (perhaps oftener) the boys of whom we are speaking (and mere athleticism need not exclude others) are allowed to make an expedition; the party must have the help of an interested master (herein, maybe, lies the main difficulty, either because he is a *rara avis*, or because the cricket-nets refuse to spare of their abundance), and he must remorselessly exclude all such boys as do not distinctly show they are "pulling their weight."

Question 5.

"Do you insist on out-door exercise for healthy boys in wet weather?"

Yes -	-	-	-	-	-	-	-	-	34
After one or two consecutive wet days	-	-	-	-	-	-	-	-	12
No -	-	-	-	-	-	-	-	-	64

Question 6.

"Do you allow paper-chases?"

Yes -	-	-	-	-	-	-	-	-	37
Rarely	-	-	-	-	-	-	-	-	26
No -	-	-	-	-	-	-	-	-	54

These are the two forms of exercise to which parents are most apt to take exception. Yet under ordinarily careful supervision there is positively no danger in the "wet-day run," and I doubt whether this is sufficiently realised by the Head-masters of Preparatory Schools. The main drawback is that it gives trouble to servants, and it is doubtless for this reason that some, who approve of it in principle, make use of it only in persistently wet weather. No one who has tried it can doubt its efficacy in improving boys' health and tempers.

With regard to the paper-chase the case is different, for it cannot be conducted safely without most thorough precautions, and many of the contributors call attention to this. Some go further and say that it is manifestly a mistake for small boys; some have abandoned it after trial; one tries it occasionally, but is "always sorry for it afterwards."

Question 7.

(a) If you hold athletic sports, are your prizes of a miscellaneous nature, or specially adapted for bearing inscriptions?

71 give prizes of quite a miscellaneous nature.
17 allow cups, etc., with inscriptions.
7 give insignificant prizes or none at all.
25 hold no athletic sports.

I have elsewhere stated the reasons which may be urged against the holding of athletic sports in the Preparatory School. To many it will be satisfactory to find that the prizes usually given are of quite a miscellaneous nature, such as bats, racquets, balls, cricket-pads, etc. Several of the contributors express a strong disapproval of inscriptions, and accordingly the cup is no longer regarded as the specially appropriate prize.

(b) What is the distance of your longest race?

12 name a distance less than 440 yards.

36 name 440 yards.

4 name 600 yards or thereabouts.

36 name 880 yards.

9 name 1 mile.

1 names a 3 mile steeplechase.

(c) "In your experience does the successful runner of the Preparatory School maintain his relative superiority afterwards?"

48 reply, Yes.

17 reply, No.

21 reply, Doubtful.

Most of the contributors answered this question with diffidence, and the general result does not throw any distinct light upon the question whether the strain of the severer races upon a young boy's powers militates against his ultimate excellence in the same field.

The following extract may be interesting:—

"Our prizes consist of a slab of chocolate, and no boy may carry off more than one prize, though he may win as many as he pleases. The races, I may add, are keenly contested; the longest is 200 yards. The boys who win prizes here invariably have done well at the Public School."

Question 8.

"As a general rule the Assistant Master in the Preparatory School devotes himself on four afternoons in the week to the supervision and advancement of its games."

Should you say that this overstates or understates the extent of his help in your school?

41 regard it as a correct estimate.

31 regard it as an overstatement.

27 regard it as an understatement.

Six contributors feel that they can practically depend upon the attendance of their entire staff every day. A few point out that in forming their estimates they have kept cricket in view, but that a smaller proportion of help suffices for football.

As a general average we may say that of every six masters four are present in the cricket field, and it should be added that to a large extent this help is given voluntarily. Possibly it may seem that this entails an unfair tax upon the energies of men who have their full share of in-school work to perform, but it must be remembered that the field-work involves little strain, and is of a nature sufficiently congenial to be recreative to most; also that in no other profession can a man rely upon three or four months of pure holiday in each year. At all events, those who deserve to succeed invariably show this unselfish enthusiasm, and the effect of their work is invaluable in developing a bright interest in the games, and a proper spirit in the playing of them. At no other period of his educational life, and in no other type of school, at home or abroad, does a boy receive so large a share of attention, both in school ($\frac{1}{6}$) and out of it ($\frac{1}{3}$), and it is to this cause that the success of the Preparatory School system is mainly due.

Question 9.

Do your masters who supervise the games also

(a) Take the direction of them as captains of the sides?

38 say, Yes.

38 say, Occasionally.

41 say, No.

(b) Personally play in them?

90 say, Yes.

20 say, Occasionally.

13 say, No.

It is evidently customary that in the ordinary organised game the masters themselves play. Several contributors call attention to the fact that they do so under a self-denying ordinance, restricting their efforts to suit the conditions, and under such circumstances their participation in the games is welcomed by the boys. In a few schools, however, this practice is discouraged or abandoned, evidently upon the ground that any advantage that the boys may gain from the exhibition of superior skill is more than counterbalanced by a loss of interest in the game, due to the resulting reduction in the value of the boy unit. In these schools the masters take the post of umpire, which gives them full opportunities for coaching and advising the players. Whether they act formally as captains of sides or not, they practically take the direction of such games; but with a view to the development of thoughtfulness and self-reliance on the part of the boy captain, and habitual obedience to the office on the part of the rest, it is evidently a growing custom to leave the initiative as much as possible to the boy captain, whose errors the master will informally criticise and remedy. It has also become customary in the inter-school match that the masters interested in either side should abstain from offering advice either directly or by wireless telegraphy from the pavilion.

Question 10.

How many hours in the week are devoted to—

(a) Compulsory cricket?

17	schools	devote less than 8 hours.
74	"	" from 8 to 12 hours.
14	"	" from 13 to 16 hours.
3	"	" from 17 to 20 hours.

The general average is $10\frac{1}{2}$ hours. Twelve hours is the number which is the most frequently given, and I should gather that it fairly represents the time devoted to compulsory cricket in the ordinary Preparatory Boarding School. The general average has evidently been affected by the Day Schools, in many of which it would seem that the organised game is only to a limited extent compulsory; whereas in the Boarding School the two terms are practically synonymous.

(b) To the games and practice of your better cricketers?

Thirty-seven schools give no extra time for this purpose. In the case of the remaining schools, two extra hours in the week represent the average difference.

(c) Compulsory football?

19	schools	devote less than 5 hours.
24	"	" 5 hours.
36	"	" 6 hours.
20	"	" from 7 to 9 hours.
7	"	" from 11 to 15 hours.

Six hours is the number which is the most frequently given, and it is also the average number.

Question 11.

How many matches (including return matches) do your boys play against other schools of the same class?

(a) In cricket.

14	schools	play no such matches.
15	schools	play fewer than 6 such matches.
68	schools	play from 6 to 12.
12	schools	play from 13 to 18.

The number most frequently given is 12, and this would allow one such match in each week of the term.

(b) In football (or hockey).

- 17 schools play no such matches.
- 28 schools play fewer than 6.
- 65 schools play from 6 to 12.
- 6 schools play from 13 to 20.

Here again 12 is the number most frequently given.

In the cases of several of the schools, which play no matches, it is explained that this is due to no voluntary abstinence, but to the fact that there are no similar schools in their neighbourhood. Indeed, there is no indication of any feeling that such matches stimulate the athletic interest to a degree that is considered undesirable; the figures, however, seem to imply that there may be some connection between these matches and the employment of the professional cricketer.

Question 12.

Do you employ a cricket professional?

- 13 say, Yes.
- 9 say, To a certain extent.
- 103 say, No.

Some contributors express very emphatic objection to the employment of the professional in a Preparatory School, and with this many of us would sympathise. According to our view it is a step in the wrong direction to delegate to a third-rate professional a task which the Preparatory School school staff should be perfectly capable of performing with all requisite efficiency and with by-products that are invaluable. In fact, to us the employment of a professional would seem to be an indication either of a deficiency in the composition or spirit of the staff, or of an excess in the estimate formed concerning the standard of proficiency to be aimed at.

Question 13.

What code of football rules have you adopted?

- 110 use the Association code.
- 10 " Rugby "
- 7 " both.

Three contributors explain that, in spite of their preference for the Rugby rules, they are forced to adopt the Association in order to secure matches for their boys.

Question 14.

To which of the following views (as referring to Preparatory Schools) do you incline?

- (a) The full benefit of cricket has been attained when boys play in the right spirit, and with sufficient skill to fully develop all the interests of the game.
- (b) Cricket, if worth teaching at all, should be taught with a view to develop the highest skill of which the pupil is capable.

- (a) 63.
- (b) 32.
- Both, 15.

It was not easy to word this question. The intention was to state without prejudice the views of two different schools of opinion, and as such the majority have accepted it. A few, however, have adopted both views, recognising no antagonism, and perhaps it would be fairer to include these among the supporters of (b), in which case the numbers would be:—

- (a) 63.
- (b) 47.

According to (a) there is a point, and by no means a low one, at which we may say that sufficient skill has been developed to enable the players to enjoy all the essential interests of the game and derive all its advantages, provided that they play fairly, unselfishly, and, according to their lights, with all their might. Enough is as good as a feast. The other view (b)

would deny the existence of any such point for players capable of higher skill and would regard the benefits of the game as more or less proportionate to the proficiency of the players. There is no more finality than there is in violin-playing—in both cases the teacher's aim should be the highest.

Collecting the arguments, so far as they are given, we find that the supporters of (a) consider that rather too much stress is laid upon matches, too little upon the recreative advantages of games; cricket is a means and not an end in itself; we do not wish to train a race of professionals; every boy should have the same amount of coaching, it is bad for a young boy to be put forward at the expense of others; there is a danger just now in Preparatory Schools that (b) may interfere with the higher interests of school life.

The supporters of (b) consider that a high standard of individual excellence must be set in order to secure the attainment of (a); also that a boy should be made to realise that whatever he puts his hand to he should do with all his might.

So brief a statement of the two sides of the question is manifestly insufficient for any real discussion of its merits, but we may accept the result, which the figures show, as roughly, yet fairly representing the balance of opinion on a subject which each headmaster must necessarily have thought out for himself.

Question 15.

Is it your personal opinion that athletic interests are stimulated to an unnecessary degree at our Public Schools and Universities?

Yes -	-	-	-	-	-	-	-	-	-	59
No -	-	-	-	-	-	-	-	-	-	42

Many contributors have expressed themselves forcibly and interestingly on this question, but it would be out of place to put forward their arguments, as a discussion would be outside the limits of our subject. It may safely be said that all are staunch supporters of school games, and recognise a strong and healthy athletic feeling as a condition of wholesomeness in the atmosphere of Public School society. The question is whether in the present day this feeling has been developed beyond the necessary point, and has thus become an evil in itself; and it is not outside the limits of our subject to ascertain the several judgments of the headmasters of the Preparatory Schools. They are men who almost without exception have themselves passed through the Public Schools and Universities, they are naturally deeply interested in educational questions, and more particularly in those connected with the Public Schools, to which they are so closely linked. The judgment which they form, quite apart from its value as an academical opinion, has a very direct bearing upon our subject, inasmuch as it gives us a clue to the principles, which may be expected to so far actuate them in their own several schools, where their authority is autocratic.

It is evident that the fifty-nine head masters, who consider that too much importance is assigned to athletics and to the successful athlete in our public schools, may be relied upon to discourage such excess in their own schools. On the other hand, it would be unfair to infer that the forty-two, who have expressed a different judgment, would take an opposite course; for many of the latter have based their opinion upon their regard for the exigencies of public school life, and would recognise that such exist only in a very minor degree at the preparatory school.

Question 16.

If you have a heated swimming bath, what is its length, breadth, and minimum depth of water?

Question 17.

What percentage of boys leave your school unable to swim?

Ten schools (out of a total of 108) possess heated swimming baths of their own. As a rule, the length of these is about 11 yards, the breadth about $5\frac{1}{2}$ yards, and the depth such as would enable a non-swimmer to stand at

the shallow end. The smallest, described as a plunge bath, is 16 feet long, 6½ feet broad, and 5 feet deep, and it is interesting to learn that it serves its purpose, for in all these ten schools the average of non-swimmers is less than one per cent.

Twenty-one schools have the use of public baths, which presumably are heated, and at these schools the average of non-swimmers is eleven per cent.

Five schools have private swimming baths, which are not heated, and the average of non-swimmers is 5 per cent. Of the remaining seventy-two schools, several reach a very high standard in swimming; the large majority however assess their estimates of non-swimmers at figures varying between ten and eighty per cent., or else have omitted to hazard a conjecture at all.

In four or five cases swimming baths are spoken of as recently constructed or unfinished; and from this we may infer that the value of them is being increasingly recognised.

Question 18.

Do you allow your boys to play golf, play fives, ride or cycle (i.) during the hours of ordinary games? (ii.) at other times?

Of the 121 contributors who have answered these questions 99 do not allow any of these recreations to interfere with the organised school games.

39 allow golf to be played at some time in the course of the day.

58 allow fives to be played at some time in the course of the day.

53 allow riding (usually for the purpose of lessons).

63 allow cycling, but 24 of these restrict cycling by limitations; in several schools boys are not allowed to cycle except in the company of a master.

THE EMPLOYMENT OF LEISURE HOURS IN BOYS' BOARDING SCHOOLS.

SYNOPSIS OF CONTENTS.

Introduction.

A glance at Schools in the Society of Friends.

Leisure Hours in one of these Schools : Spring, Summer, Autumn, the Christmas Exhibition, Extracts from Diaries.

Environment needful for the healthy growth of Leisure Hour pursuits.

Deductions from experience : effects of these pursuits on education, direct and indirect : spontaneity : loafing : fickleness.

Appendix : Questions asked of correspondents. Answers from old Scholars and Teachers.

THE EMPLOYMENT OF LEISURE HOURS IN BOYS' BOARDING SCHOOLS.*

The difficulties foreseen in meditating upon writing "Hobby-Horsically" are only increased by the facts that this essay appears in a volume devoted to Preparatory Schools, whilst the school known most intimately to me takes boys from 12 to 18, that it assumes that the schools of the Society of Friends form a type, when every schoolboy knows that English Secondary Schools are unorganised and chaotic, and that the Friends' Schools stand, for better or for worse, somewhat apart from the main current of the educational stream of Great Britain and Ireland.

Most of the masters and boys in our schools are members of the Society of Friends, a Society so small that the master often knows something of the family before the boy comes to school and often retains a more or less remote intimacy with the family when schooldays are over: a Society whose boys spend a large number of quiet evenings at home before going to school and during the holidays, undisturbed by late hours, busy in their leisure, whether influenced by the traditions of the schools or by the practical workings of a sober-suited Quakerism.

The founder of the Society of Friends showed a wide view of education when he recommended the establishment of two boarding-schools, one for boys and one for girls, for the purpose of instructing them "in all things civil and useful in the creation." A century later, when the Friends founded Ackworth School, they followed Locke, probably unconsciously, in not placing learning on too high a pinnacle. Instruction in reading and writing was to be given and "some useful employment may be provided for the boys according as their age, strength, talents or condition may require. Learning and labour properly intermixed greatly assist the ends of both—a sound mind in a healthy body."

In 1829 the Yorkshire Friends founded a school in York for the education, religious, moral and literary, of the sons of Friends belonging to the middle classes. They were happy in their appointment of their first head-master, John Ford,

"Whose name, a ghost,
Streams like a cloud, manshaped, from mountain peak,
And cleaves to cairn and cromlech still."

His watchword was influence rather than authority; he was Herbartian, though I never heard that he knew of the master's existence, in regarding character-building as his true work, and in providing many-sidedness of interest. At a time when inter-

* To my colleagues and numerous correspondents I owe warm thanks; without their efficient and courteous help this Essay could not have been written.

school games were out of the question in Friends' Schools he founded the first school Natural History Society, August 14th, 1834. Sixteen years later he founded the Essay Society in which boys read and discussed original essays. Both societies still live and flourish, though Ford would hardly recognise his grown child.* As the school increased in numbers and youthful enthusiasm spent itself, it was found that drones had crept into the hive: the active workers formed themselves into the Natural History Club, and the Essay Society was limited to the older boys.

A glance at leisure hours in each term followed by a glance at the Christmas Exhibition will show something of the boys' environment.† We look into the school at the beginning of the Spring Term and find some boys and a master writing the Annual Report of the Natural History Society, an elaborate patch-work quilt made from the Sectional Reports of the Curators. Later, as the executive body on which both masters and boys are represented fills up the roll of Curators—Archæology, Astronomy, Botany, Conchology, Entomology, Geology, Meteorology, Microscopy, Zoology, Photography, Carpentry, Drawing—we ruminate,

Could a man be secure
That his life would endure
As of old for a thousand long years,
What arts might he know!
What acts might he do!
And all without hurry or care!

Then the whole school comes together in its capacity as Natural History Society under the presidency of the headmaster, for an "Exhortation Meeting," when the Curators lay bare the charms of their respective hobbies. Again the school assembles

* In his evidence given before the Schools Inquiry Commission, December 1865, Ford says:—"We have sought to make ample provision for the energies of the boys at times when they can neither be engaged in active play nor in school lessons, and, in order to effect that, we have an observatory furnished with a good equatorial, a transit instrument, and a good time-piece; this provision has been exceedingly valuable in occupying the elder scholars that were fond of mathematics so that all the boys in the upper class have the opportunity of familiarizing themselves with the use of those instruments; they are not compelled to do so, but some have more taste for it than others, and those who have, will soon make themselves very clever at it, and will take the right ascension and declination of a star, and be able to set the instrument, and find the star, in the centre of the glass. Q. Do you think under your system all the boys who have a natural capacity and turn for these subjects are sure to have an opportunity of developing it?—A. Certainly; and besides that we have a workshop. Q. What prizes do you give?—A. It is merely a society among the boys themselves. There is an association in the school which is called "The Natural History and Polytechnic Society" the income of which will be perhaps £7 or £8 a year, which is pretty much distributed in prizes. There is an annual show, gentlemen not belonging to the school are asked to judge, and prizes are awarded for botanical collections, collections of butterflies and beetles, collections of plants, collections of parts of plants illustrating botanical principles. There is a written examination on botany. Prizes have been established for these things. Q. Do the boys make these collections in their spare time?—A. In their walks and in their spare time." Schools Inquiry Commission, Vol. V., Part 2, pp. 287-288.

† My subject is limited to Boys' Schools: the same system prevails in Friends' Girls' Schools.

for prize distribution; as no prizes are given for class work, those for leisure hour pursuits awarded at the Christmas Exhibition rise in value. Before the term ends, country walks have resulted in the finding of early flowers, city walks amongst the speaking memorials of mediæval England and Roman Eboracum have been fruitful in the development of embryo archaeologists, and a few half-holiday excursions have been organised.

Once a fortnight we may find the Natural History Club holding its meeting, listening to reports of finds, or to essays on original work; once a week the Essay Society* or Debating Society meets, and every evening boys are at work in the Photographic or Natural History Rooms, the Observatory or the Workshops. In the Summer Term few are the "halves" when groups of two or three cannot be found in some favourite hunting ground, and few the weeks when no organised excursion is made to some more distant place. If the Spring and Summer Terms and the long vacation are the chief collecting times, the Autumn Term is the busiest season of all with the Christmas Exhibition in prospect. The last day of Term is red-lettered: this has been the goal of many; for this, all those busy evenings were a long preparation; for this, expert judges were labouring yesterday; for this, the tyro and the adept alike wait. How the prizes, the love of study the desire for fame, that

"spur that the clear spirit doth raise
To scorn delights, and live laborious days,"

divide the honours in forming this exhibition I cannot decide.

At the last exhibition there were collections of flowering plants, ferns, mosses, inland shells, sea-shells, butterflies and moths, beetles, skulls and breastbones, eggs, microscope slides, rubbings of brasses; there were astronomical charts, original designs, archaeological diaries, natural history diaries, photographs, plaster of Paris casts of footprints, various specimens of carpentry. Visitors came to inspect, speeches were made, and the prize winners announced.

One of my late colleagues sends me a table showing the percentage of boys who have taken prizes† during the last seven years, ranging from 63 per cent. of the school to 87 per cent. with an average of 74 per cent. per year. He has also supplied me with two other tables: one shows that taking the five chief "naturalists" of each exhibition for eight years, 28 were good at class work and 12 poor. The other shows the number of boys in successive years who took a real interest in leisure-hour pursuits, and yet were "a great nuisance and very disorderly":—7, 4, 3, 3, 2, 1 (total number of boys 80). Even the optimist does not dare to assert that the type is a vanishing quantity; but there is undoubtedly a general feeling that everyone ought to be doing some definite work.

It will be seen that collections form the chief exhibits: but the kind of work most encouraged amongst the older boys is generally best seen in the diaries. Last Christmas nearly forty volumes had

* In the last seven years the average number of essays per session is 43.

† It will be seen that prizes are given profusely: in fact most boys who exhibit leisure hour work are rewarded by prizes.

to be examined by the judges. Some diaries of recent years lie open before me now. One boy has many volumes of archæological diaries, with his visits to places of interest carefully noted, and admirable drawings and photographs of special pieces (one series represents gateways, Early Norman, Late Norman, Transition, Early English, Decorated, Perpendicular and Debased).

As I turn over the pages of another archæological diary I note careful drawings from the originals, of St. Bede's Chair at Jarrow, Early English Doorway and Decorated Windows at Finchale Abbey, Scalloping in Bedern, Section of Perpendicular Pillar (Malton), Section of West Door and base of Pillars (Skelton), Norman Stringcourse and Door with Early English label (Stillingfleet); and so I might run through fifty similar sketches in that volume.

My next cuttings are from a diary of 1885. The author had taken keen interest in the study of astronomy, helped by the use of the School Observatory.

"September 1st. As a beginning looked at Polaris, ϵ Lyre, and the Great Nebula of Andromeda. Noticed a small star in the centre of the latter which I do not remember having seen before, and which is not down in a small drawing I made on September 15th, 1884. . . . September 9th. I found out this morning that the new star spoken of by Mr. R. A. Proctor last night was the one seen by us in the Great Nebula of Andromeda on the first of the month."

The author makes light of his observation now in lending me his diary, and points out that the discovery of this Nova was made and announced on August 31st, and that it became known later that it had been observed on August 19th; but the fact remains that the schoolboy of sixteen had so good a knowledge of the heavens, and was so keen an observer that he had made the discovery independently.

Next I cull beans from a diary of 1897-98:—

"June 4th. Bought some dried broad beans, put four in water. After some hours took one out, dried it and then squeezed; water oozed out at the micropyle, a small hole at one end of the scar (*hilum*) by which the bean is attached to the pod. 8th. The four beans which I have been keeping in water in my desk have sprouted. The young shoot has burst the skin just in front of the micropyle. What then is the use of the micropyle after fertilisation? 9th. Took four small flowerpots, put two inches of soil into each and then beans as follows:—

- A. Growing bean, sprout uppermost.
- B. Bean soaked over night. Future sprout pointing down.
- C. Bean with skin removed. Sprout up.
- D. and E. Two dry beans, sprouts up.

10th. In order to investigate the use of the micropyle and the porosity of the skin, took four beans. Blocked up the micropyle of one with Canada balsam, that of another with asphaltum, stripped the skin from a third, and put all four in a basin of cold water in the dark. 14th. Dug up the beans I planted on the 9th to see how they were getting on.

- A. Radicle turned down.
- B. Radicle growing down as placed.
- C. Sprouting. Radicle turning down.
- D. and E. Just sprouting.

This shows that whichever way up the beans are planted the radicle always grows downwards. How does it know which way to turn? By avoiding any light from above or by following its weight? I should think the latter. C. has sprouted though it has no skin. This points to the skin being simply protective. Re-planted and watered."

(Further observations and careful drawings follow throughout June: next January the insatiable boy returns to the attack.)

"January 12th. Last summer I found that whichever way up a bean is planted the radicle still turns down. To see if I could find out why took two stoneware jam pots (5½ by 3½ ins.). Half filled each with leaf mould. Then in each planted three beans, those in one having their micropyles pointing towards the top, those in the other towards the bottom of the jar. Filled each up with leaf mould, pressed down tight and tied a piece of gauze over each mouth to keep it in. Turned both jars upside down and fixed them side by side in a tripod stand. Put the stand in a warm room just in front of a south window with a sloping mirror beneath to throw the light upon the gauze-covered mouths of the jars. Now if the radicle turns down on account of gravity (either its own or water's) it ought still to turn down, but if it turns down by fleeing from the light and air it ought now to grow upwards. Let us wait and see. 13th. Turned the jars upside down for five minutes to water them. 15. Watered beans as on 13th, only left them upside down for 15 minutes so that the water might soak well in. 18th. Opened the stoneware jars containing the beans. Here are drawings of them. So all the radicles have begun to turn down in spite of the light coming from below. But then I doubt if light would penetrate sodden grass mould, and the air would go through everywhere. They should have been planted in ordinary earth. What would the radicle do when it came to the gauze at the bottom?"

Last Christmas a boy showed typical specimens of insects injurious to vegetation. He has written me the following description of his work:—

"I had to obtain the various stages, larva, pupa, imago, together with the normal and damaged plant, which of course involved work through the whole year. I arranged each species in the various stages in a separate case, about 10 by 7 by 1½ ins. covered with a glass lid, writing a few words descriptive of its life history. In cases where the specimen was very small I made a magnified drawing, doing the same for specimens which were difficult of preservation. For example:—

"Large Cabbage White, *Pieris Brassicae*. I put into the case an eaten cabbage leaf, a drawing of the larva, two pupae and a butterfly.

"Oak-apple Fly, *Cynips Kollari*. Larva preserved in spirits.

Sketch of ditto magnified. The fly and magnified drawing of parasite flies. Oak-apples, whole and in section; also others showing where birds have extracted the grub.

"Bean and Pea Beetle, *Granarius*. Larva, drawings natural size and enlarged. Pupa ditto. Beetle and enlarged drawing. Infested beans and peas."

The features already named do not form a sufficient environment for the healthy growth of these pursuits. Tradition, which enjoins abstinence from a "humble but nutritious compound in the form of suet pudding and plums," on the part of the occupants of two dormitories in a certain public school,* is all powerful here. We have sixty years of these traditions behind us, and our Old Scholars' Association, a powerful organisation which meets at the school every Whitsuntide and backs us with financial support, and what is more with moral support. A few years ago they founded a "Research Exhibition" if the term is not too lofty for a school. "Any Natural History work may be shown. Careful diaries will be essential, and systematic work will have a higher value than scattered observations." It was won last Christmas by the destructive-insect boy, with these comments from the judges: "This work shows that originality and scientific spirit which it is their special object to look for and encourage."

This side of school life cannot flourish with a rampant athleticism. I know full well that compulsory athletics is an important factor in keeping down the base in man. But I am dwelling in no fool's paradise in echoing the opinion of the great educationists of to-day about exclusive athleticism; and I know that a restrained athleticism allows of school teams playing football and cricket matches in a way that maketh not ashamed. This restraint involves self-sacrifice on the school's part in deliberately making little of the matches and athletic sports; it may involve some loss of *esprit de corps* through there being no large crowd of boys always present to cheer on its heroes; but it tends to a fairer sense of proportion than an almighty athleticism.

As compensation for these self-denying ordinances much must be made of other school functions. The headmaster will sometimes be present at Essay Meetings, the Natural History Society's Prize Distribution will step into prominence, large numbers of visitors will come to the Christmas Exhibition, and now and then the Natural History Club will be responsible for a *Conversazione* to which the neighbourhood is invited.

Again, the Staff is in sympathy with these traditions: and should be in such touch with the boys that, without sacrificing true dignity or discipline, they can continually hold out the kindly hand of encouragement to youthful toilers in the world of research.

Then the time-table may be so arranged to allow of a minimum of loafing with a maximum of planning out time for self. Apart from short recesses there are three separate hours each day, half-holidays excepted, which a boy must fill up for himself. The midday hour is for exercise, which means football or cricket for

* "Thirteen Essays in Education," p. 13.

nineteen-twentieths of the boys; the afternoon hour is spent in games, walks or indoor pursuits; and the evening hour, after "Prep." is used for more "Prep." by a few and for leisure-hour pursuits by most. This involves a Master-on-duty in each hour, and the two "Prep." Masters in the evening, ensuring an absence of rowdiness in the living rooms, and the possibility of carrying on leisure hour pursuits at all times.

Lastly, it is of the greatest importance that the younger boys should see the best work of the older boys (boys of 17 and 18) in order to appreciate the real meaning of these traditions. It is true that in their last year the older boys are unable to give much time to this kind of work. The hand of the Examiner is resting upon them: but it is of paramount importance to let his hand weigh lightly on the whole school, particularly in respect of early specialising.

In approaching the last part of the paper containing some deductions from our experience of providing a wide range of pursuits for all kinds of boys, not omitting the waifs and strays of intelligence, I am reminded of Warterton, who was often caught out of bounds until the school authorities, recognising that this arose from an over-powering passion for the pursuit of natural history, appointed him school ratcatcher with attendant out of bounds privileges.

It is essential for the success of these leisure-hour pursuits that their connexion with the regular school lessons shall be extremely loose. As the wheel of science revolves we note improvements in the method and accuracy of astronomical work when astronomy lessons are in the ascendant and better botanical work when the wheel turns experimental botany lessons uppermost. But the lessons hardly tell on the number of workers, nor is the effect satisfactory on the out-of-school work, if the lessons are continued too long,—even explosions satiate.

The indirect effect of leisure-hour pursuits on school lessons will be mainly considered later: but even the direct effects have a tendency to be indirect. It has often been demonstrated that the voluntary work of botany and astronomy increases the intelligent apprehension of the "involuntary" work, and that writing papers for the Essay Society and Natural History Club improves the literary style of the class answers: and it is easy to show cases where a collection of rubbings from memorial brasses has affected the intelligent apprehension of the history and literature lessons.

But the most important of these effects has been seen in many boys who have been good-for-nothings intellectually and morally until in some chance leisure moment they found their work and did it: this reacted at once upon the life moral and intellectual: time was too valuable to be spent in detention of any kind.* Or a boy has shown his first zeal in class because he has found his master interested in his out-of-school work, which under these

* A case of this description is quoted by Mr. Andrews in the "School World," Feb. 19th 1900, p. 49, in an article on "Leisure-hour Pursuits in Boarding Schools."

conditions increases so largely the number of points of contact of boy and master. It is a valuable means of gathering up fragments of schoolboy nature that nothing be lost.

With regard to the utility of leisure-hour pursuits in their general educational bearing, it seems as if they harmonise in an especial way with Herbartian principles. I need only call to mind some of Herbart's phrases:—"Non scholæ sed vitæ discendum: not for ostentation but for use.* . . . In the culture of the circle of thought the main part of education lies."†

Nor do I fail to appreciate the truth of Herbart's statement that "Punctilious and constant supervision is burdensome, that the need for it grows in the degree in which it is used, and that at last every moment of its intermittance is fraught with danger. Further it prevents children from knowing and testing themselves,"‡ and yet I maintain that this system involves supervision—informal supervision it may be, the very antipodes of espionage. Every headmaster will admit the impracticability of a free hour on dark winter nights with perfect liberty—"the price of liberty is eternal vigilance." If the premises are built for the purpose, and every evening sees boys at their own work in various classrooms, the Laboratory, Observatory, Workshop, the Natural History Rooms, the Photographic Rooms, the supervision of the master-on-duty need not be too obvious: and his responsibilities are shared effectively by curators and prefects.

Self-confidence is inculcated by addressing the whole school at Exhortation meetings, and by the Essay and Debating Societies at which the presence of a master, friendly to the subject and friendly to the boys, is felt to be no drawback. It would of course be fatal if he had to use disciplinary powers: I have never known such a case.

The Christmas Exhibition has the advantage of an examination without the disadvantage. Sir Stafford Northcote, afterwards Lord Ildesleigh, said in one of his charming addresses that the great gain of an examination was the businesslike training resulting from the candidate being obliged to have everything ready by a particular date. The same is true here: each boy must so plan his work that all is in order three days before the end of term.

It is not my province to offer criticisms—readers will pour them out like fruitful April showers—but I may say that in the endeavour to develop the individuality entailed in this system there is a danger of minimising corporate life and communal responsibilities; for the work can be done alone both at School and afterwards, apart from association with others. On the other hand powerful traditions make working for the good of the school an incentive to these pursuits: and one of the most pleasurable effects is the simple, kindly help that is continually being handed on from an expert to a beginner.

It is impossible to overestimate the value of these hobbies in keeping the mind pure: it is the empty head and stagnant body that conduce to impurity.

* *The Science of Education*: Herbart: Swan Sonnenschein & Co., p. 193.

† *Ibid*, p. 214.

‡ *Ibid*, p. 97.

"A man and his Hobby-Horse," says Tristram Shandy, "may not act and re-act exactly after the same manner in which the soul and body do upon each other: yet doubtless there is a communication between them of some kind . . . so that if you are able to give but a clear description of the nature of the one, you may form a pretty exact notion of the genius and character of the other."

All these pursuits foster patience, acquisitiveness, industry, and on the boy's own initiative. With regard to spontaneity our view is in favour of keeping the leisure-hour pursuits apart from ordinary class work. I have known a headmaster so strong on this point that he hesitated to have the youngest boys taught carpentry as a class subject for fear of killing spontaneity. On the other hand the experience of two or three new schools that have made some of these pursuits their own in a special way is in favour of compulsion. I am taking a broad view of the word spontaneity, and include under spontaneous work all that is done under a fostering system which may be said to bribe by prizes and to drive loafers into work by the alternative of something more distasteful. There is even the danger of an over-zealous curator adopting Mrs. Pipchin's educational system of preventing the child mind from expanding itself like a flower, by opening it with force like an oyster.

By providing for the widest possible range of voluntary pursuits loafing, in vacations as well as in terms, is most effectively strangled. Small boys are generally caught by collections, not that there is much value in a collection, but it involves some habits of observation; readers of Locke know the value of habit and Darwin tells us that until he had nearly reached manhood he was little more than an enthusiastic collector. But as the literary man has his facts before writing, and the politician ought to have before speaking, so collections are the portals of Natural History work. As the boys get older, collecting is discouraged, attention is directed to study and, as has been said already, diaries are looked on as a special feature.

Fickleness borders on virtue in small boys; it may be the bursting mind opening out to all that is new in the great unfolding world of mind. "Manysidedness of interests, which must be distinguished from its exaggeration—dabbling in many things"* fills the yearning. The Christmas Exhibition is a definite object and keeps the fickle ones concentrated.

Our experience is the same as in class-work; boys do well to take up various subjects in succeeding years; they find their special work later and do not specialise too early. As I conclude this paper, apart from the Appendix reserved for the invaluable comments of some of my correspondents, I put into the two words tradition and sympathy the essentials for carrying out the system in our School: tradition of long years fostered by old scholar; and parents, sympathy of the Staff combining enthusiasm with self-effacement.

ARTHUR ROWNTREE.

* Herbart, *op. cit.*, p. 111

APPENDIX.

In this Appendix I am placing cuttings from a number of letters from (I) Old Boys who have gone through the system, and (II) Teachers who have had practical experience of it.

The questions specially asked are as follows :—

1. Natural history collections, etc., manual occupations, literary recreations : (a) their bearings on the more regular lessons of the school ; (b) how are they found to be useful in their general educational bearing ?

2. How can the spontaneity of the leisure occupation be maintained when the occupation itself is more or less consciously correlated to the class-work.

3. How is it best to war against (a) loafing, (b) fickleness in aim ?

I. OLD BOYS.

A. 1a. "Natural history collections . . . meant when taken up in earnest slightly less efficiency in the regular lessons at the school . . . I invariably spent the hour from 7.30 to 8.30 p.m. in the Natural History Room over my diaries."

3a. "Loafing was an almost unknown and unpardonable sin . . . the boys undertook it . . . I was taken in hand by two energetic curators . . . and positively not allowed to do nothing. I learnt to mount a microscope slide after the first bell, and I was washed before the second, and finally produced the biggest collection of slides then on record, one third of which had been done in such odd times . . . Mr. C. quite by accident gave me an interest in botany for which I can never cease to be thankful."

B. 1a. "As far as my experience goes they had very little bearing upon the regular class-work."

1b. "Natural history collections are . . . especially valuable in training the powers of observation and in giving rise to a scientific attitude of mind . . . In this connection I think the Natural History Diary system is most admirable, and there is no doubt that the making of collections is of great help if not essential to a boy who keeps such a diary. The care necessary for properly naming and arranging a collection seems also to be of value in inducing accuracy of observation and thought."

3a. "A comparatively small proportion of boys actually prefers loafing to a definite employment of their own choosing, and if a certain amount of time is allotted in which they must either find some intelligent occupation for themselves or else be compelled to do work, not many choose the latter alternative. The Exhibition and Prizes supply a motive for thorough work ; a boy is ashamed to exhibit slovenly work, and knows he will get no prize for it."

C. 1b. "The great value of these hobbies is not their direct training. I imagine nine out of ten of us drop them altogether within a few years of leaving school. The value lies in learning how to occupy oneself usefully when not under compulsion."

D. "I should like to say once for all that real promise in scientific by-pursuits is compatible with eminence in games. I have seen the lad who captained both elevens indefatigable in collecting plants, and careful as to their preservation and accurate nomenclature."

1a. "The mental training provided by our School Essay Meetings was very valuable. We were encouraged to write essays and to read them ourselves, were criticised or applauded and tried again. Some of us have been trying ever since."

1b. "As I have seen these pursuits followed they have amounted to 'extra subjects' which the pupils taught themselves gratuitously. A perfect interested in botany or beetles will take immense pains with the collections of the younger lads, lead their excursions, assist in naming and arranging, etc."

3a. "The leisure-hour employments with which I have dealt are in themselves the finest prophylactics for fickleness. A collection begun and discontinued is a perpetual reproach. The Annual Show with its displays, its judging and prizes haunts the fickle boy until persistence becomes habit."

II. TEACHERS.

E. *Headmistress*. 1a & b. "There is no attempt consciously to correlate these pursuits with school lessons with one exception: members of the Archaeology Society are encouraged to keep diaries illustrative of their lessons in history and literature The pursuit of one or more of these occupations is supposed to foster industry, patience, observation, independence and individuality Manual occupations we value extremely for girls as giving them mastery over some other tool than the needle, as fostering ingenuity, independence and self-help"

"Perhaps they may bear directly in one particular. It is usual to get the girls to give from time to time short lectures of from fifteen to thirty minutes in length on some subject connected with the Societies' work."

2. "No correlation. With us the spontaneity is more likely to be interfered with from another cause. To work a society satisfactorily it is found best to have a teacher on the committee. The tendency perhaps is for the girls to look too much to the teachers, and so lose the power of initiative. To avoid this the teachers try as much as possible to work on the same platform as the girls, and to put as much responsibility on the rest of the committee as they can Our school magazine, I may say, is run entirely by the girls, the staff contributing articles and criticism, but taking no part in the management."

3a. "The *raison d'être* of these out-of-school pursuits is to give rational interests and supply food for intelligent thought and legitimate channels for activity. As such, they are invaluable in a girls' school in preventing aimless wandering about, silly gossip, and above all, sentimentalities and other inanities."

3b. "Steady encouragement from teachers and some amount of help and guidance often prevent a girl giving up some pursuit she has begun."

F. *Headmistress*. 1a. "Correlation with school work is most effective when secured by passing suggestions rather than by direct exhortation. Leisure-hour pursuits are sometimes made too much like 'school' either from over-organisation or from too much supervision, or from too strict correlation with schoolwork. If such pursuits are regulated by societies they are best left largely in the hands of the children, for they learn more by their own mistakes than by our wisdom."

1b. "Hobby-horse riding is grand exercise, healthful for mind and body, a valuable relief from the tension of life, and excellent for developing individuality I would try to start each child in life with about four hobbies, *e.g.*, winter indoor, carving, art-needlework or bookbinding; winter outdoor, geology, mosses, meteorology; summer indoor, designing from natural forms; summer outdoor, some branch of natural history Good training in unselfishness and philanthropy may be combined with many of the manual occupations if the objects made are destined for Christmas distribution to the poor, sold by auction or bazaar for some charitable fund."

3a. "Tenacity, perseverance, neatness, steady industry, ingenuity, these are tender plants in the case of beginners and need to be brought on by artificial heat; later, the plants should be strong enough to need no shelter or prop I have always found the lower middle school most difficult to tackle (ages 11-13). I believe we sometimes leave them too much to themselves in our desire not to cramp their ideas and stifle originality: at that age they are far from resenting supervision and criticism—on the contrary they long for it at every turn, and a great deal of personal help and supervision is needed for starting the younger ones in useful pursuits and hobbies. Take care of the Shell, and the Sixth will take care of itself."

G. *Headmaster*. 1b. "The full employment of the leisure of boys especially in a boarding school, is one of vital importance for their mora

and intellectual welfare. A boy who begins a pursuit of this character has taken a step . . . in a course of self-education. When school days are ended studies begun in the class-room are to a large extent abandoned ; but the instances are many in my experience in which an interesting pursuit or hobby has been a lifelong means of self-culture. Into the intellectual life of many dull boys a new awakening has been infused by the gradual acquirement of an absorbing interest in some pursuit. And this intellectual awakening is often accompanied by a marked moral improvement. A boy who is dull in school may be restless and troublesome if not worse ; but if thoroughly interested he becomes contented and a loyal member of the community, and a gradual development and improvement of character ensue. And the influence of an interesting and informing hobby is most helpful in the years that ensue after school life, helping to keep a young fellow straight. . . . A good hobby, especially one connected with the study of nature is also a matter of great advantage in middle and later life, a great interest in travel, and a solace and resource amid business and other worries. The proper management of these pursuits (as well as of Essay and Literary Societies) gives ample scope for the training of boys in management and self-government. The master will always be in the background but not too obvious. The immediate working of these societies may often be imperfect and crude : but I am persuaded that many of the most important results of education, moral and intellectual, are assisted by the careful fostering of the employment of boys' leisure-time."

2. "It is quite needful that these pursuits should be spontaneous, and the connection between them and schoolwork should be a loose and flexible one, suggestive only. Masters should look out for a boy's bent, and if he shows any interest he should foster this, even if the particular bent be not what he considers the best work."

3a. "The simple remedy against loafing is compulsory games. But do they accomplish it without a sacrifice of what is still more important, the learning how to fill up leisure-time in a right and useful way? There must always be a few boys (most valuable as are the school games) to whom these are distasteful, and for some of these manual work, photography, the study of nature and the country walks required, form a most valuable aid against the perils of loafing. It is as important that a boarding school should be equipped with a good workshop, rooms for natural history, museum, dark-room, observatory as with studies and laboratories and class-rooms."

H. *Assistant Master*. "I am no theorist in matters educational: I would much rather employ (in leisure-hour pursuits) 100 unruly boys on the most miserable half-holiday than rack my brains on the why and wherefore of my actions."

1a. "I have noticed increased interest in actual School work when subject taught has had any bearing on a boy's special hobby."

1b. "All leisure pursuits are more or less character-forming, as they must tend to carry out Archdeacon Wilson's great principle, the importance of what a boy does by himself for himself."

2. Spontaneity. "This is bred of enthusiasm A stimulating talk will do much to arouse interest It is our business to see that the germ of enthusiasm does not die a premature death Personal influence is the strongest lever I know."

The following is taken from life:—"A. was set to make an ordinary dovetail-joint in a School lesson. Walking along the shed soon after he noticed a playbox with the same kind of joint. Happy thought, 'I'll make a playbox.' When he had matriculated in this way he passed his 'intermediate' by means of a coalscuttle and his final by a davenport."

3a. "Insist on every boy having something to do Make your net large enough to catch all kinds of fish When the loafer has once taken up a hobby, see that he is not starved for want of encouragement. Daily, nay hourly, assistance is often necessary. It may not be more than a word or look But a boy must have time to vegetate. He is a wise master who knows when to let a boy ruminate and vegetate."

I. *Assistant Master*. 1b. "The great value lies in bringing out boys who appear dull at ordinary lessons Very seldom the keenness for such pursuits renders the boy too engrossed for attention in class."

Should any fact be named in the lesson which happens to bear on his branch his attention is very marked."

K. *Assistant Master.* 1a. "The main principle is one of contrast between natural history and language teaching, literary pursuits and science teaching: also between hobby and probable future occupation.

1b. "The main value lies in the spontaneous effort after knowledge (prizes taking the place of authority), widening the view of life, developing powers of observation and experiment, etc., developing tastes (beyond making of a livelihood)."

L. *Headmaster, not connected with any of the Friends' Schools.*

2. "In Natural History it is not so much collections (which may be very worthless) as intelligent observation that we try to encourage; and, once a boy's interest is aroused, we leave him to follow his own line. And although their activity is not, in the first instance, spontaneous, there is, I believe, every bit as much keenness in the end, or even more, as interests are often in this way forced to wake that would otherwise have lain dormant. Few, I think, would seriously maintain, that the interest in games is weakened or destroyed by their being made compulsory for all; and I believe the same to be true of these other interests."

3a. "And in this way by obliging every child to take up some indoor interest or interests in the winter, and one or more outdoor in the summer, loafing on any large scale becomes almost impossible. It is not of course enough to put one's name down for this or that; many, the beginners especially, want a good deal of looking after and encouragement. But this has its good side; for keenness depends chiefly on the personal influence and example of the teachers and elder children."

3b. "This and the growing tradition of a school must discourage mere fickleness of aim; but I believe that in most cases not only a wide range of choice is good, but a certain amount of experiment—the taking up of different branches in different years until a lasting interest is found. For we do not want to turn out naturalists after all, but to teach all to use their eyes and hands and to care for the world of nature and of thought."

PREPARATORY SCHOOL LIBRARIES.

A taste for reading is probably acknowledged by all who think to be one of the surest and most enduring sources of happiness; and if this is so, it evidently must be one of the main aims of education to rightly develop this taste. While, however, there is a general agreement as to the end to be sought, there seems to be a considerable divergence of opinion as to the means most suitable for its attainment. Roughly, there appear to be two extreme schools of thinkers on this question. There are those who advocate strongly the principle of non-interference, whose dictum is "Lege, lege, aliquid hærebit," who tell us that, just as with the body a child's natural tastes indicate what is wholesome for it, so also it is with the mind. On the other hand, there are those who appear to go to the other extreme, who are inclined to dictate unduly to a boy's mental appetite, and not content with trying to keep poisons and too strong stimulants out of his way, even discourage the consumption of perfectly harmless and wholesome food, because it appears insipid to a more mature taste. Between these two extreme systems of non-interference on the one hand, and an unwise interference on the other, is that adopted apparently by the great majority of preparatory school-masters—a wise and sympathetic interference, or rather guidance, which recognises the necessity for development, which never attempts to force unduly such development, and which is quick to perceive and encourage half-developed tastes and nascent predilections.

Before discussing further the measure and method of such guidance, it would be well, perhaps, to consider some of those influences, which at the present day seem to many of us likely to militate against the development of this taste for reading. In the forefront we should probably place the multiplicity of books, now constantly coming out. At first thought we might be inclined to believe that the gain here far outweighs the loss; and possibly, if we compare the present superfluity with the absolute scarcity of a hundred years ago, we are right in congratulating the present generation. But still there is little doubt that this very wealth of books does lead to an utterly haphazard method of reading, which runs counter to any true progress in the choice of books. Newness rather than intrinsic merit is apt to be considered the chief desideratum. In the next place, the character of the books most popular among boys at the present time is by many of us considered detrimental. A boy, for instance, who is reared on extreme sensationalism, loses his appetite for less exciting fare; and even the rapidity with which incidents succeed one another in the books of a less sensational order weakens a

boy's power of taking an interest in a more sustained plot. But above all else, we believe that the great number of magazines now issued is a very serious danger, and that the constant perusal of such magazines exercises a most dissipating effect on the mind, making their readers intellectually impatient and undisciplined. That such a fear is well grounded is evidenced by the deteriorating effect of such magazines on the intellectual life even of adults. It is a sad but common sight to see tables, on which till lately books of real worth were always to be found, now covered by a multitude of periodicals of no literary merit. On the other hand, we are reminded that the supply of intellectual food is in a great measure equalised to the demand, and that there are boys to whom the short story, magazine article, or even the details of a cricket match, supply a mental stimulus, which otherwise they would lack altogether; and it is certainly true that amid the variety of subjects treated of by some of these periodicals, a boy does gain a good deal of general information, and may even find in them just that particular interest, which in his case is to develop into a valuable and abiding taste.

Having spoken shortly of some of the special conditions characteristic of the present time, which must either favourably or adversely affect the growth of a right taste for reading, it would be well for us perhaps to consider next the methods commonly adopted in preparatory schools for making the best use of such favourable conditions, and for mitigating the evils of such adverse ones. In the first place, there is almost an invariable custom to have a school library. We feel that too much trouble cannot be taken in the selection of books, and at the same time it is recognised as important, if the library is to be a popular institution, that the boys should regard it as their own library and not their master's, so that they shall have some part themselves in the work of selection. It has been found a satisfactory plan in some schools for a small joint committee of boys and masters to be formed for this purpose. To take one instance—the committee comprises the head master, the librarian master, and the captain of the school as *ex officio* members, and two other members of the school elected by the boys. Before a meeting for the choice of books is held, a paper is posted, on which any member of the school can enter the names of books which he wishes to recommend, and after discussion of these or other books the committee make their selection, the masters guiding *ὡς ἀφανέστατα* the decision. The main principles to be recognised are the necessity for books suitable for the different ages and individual tastes of the boys, and the limitation of books depending for their interest entirely on sensational incident.

At this point it may be interesting to notice what books are most commonly read by preparatory school boys at the present time. For this purpose a return has been made by the masters of a large number of such schools, stating what books are most popular among their boys. From these returns it is clear that next to short stories of the Sherlock Holmes and Brigadier

Gerard type, Henty's books are by far the most commonly read. After Henty, in order of popularity, would probably come Stanley Weyman, though Manville Fenn, Ballantyne, and Kingston would run him close. Anthony Hope, again, is very popular, as also is Conan Doyle. Among individual books the "Treasure Island" still holds, as it most certainly deserves to do, a foremost place, while the delight most boys take in the "Jungle Book" is a very happy sign of a thoroughly healthy taste. One point that has struck us forcibly in the examination of these returns, is that Marryat has almost ceased to be read. Possibly this is partly due to discouragement of his works by masters, owing to a prevalence of somewhat strong language and some passages of dubious taste in his writing; but we are doubtful whether his practical disappearance is not a real loss. Dickens ("Oliver Twist" is the most popular of his books) is still fairly well read, and Scott, too, is read by the more intellectual, but we are afraid that the present prevalent craze for short stories will cause him more and more to fall into disfavour. There has risen a spirit of rebellion against all books that require any patience, and that do not plunge at once in *medias res*.

In addition to the necessity of having a well-selected library, we must all feel that it is essential, as far as possible, to have the ideal librarian. Beyond all other members of the staff, the true librarian should be, and is, the *parens mentium* of the boys, for whom they feel the genuine *pietas*, whose advice they delight to ask, and in whose judgment they have confident faith. He should be, we believe, a man of ripe experience; for the quite young master is too often inclined to forget, that what seems feeble and insipid to him, may be just the food the small boy is most capable of assimilating and profiting by for the time being. The ideal librarian must have that true wisdom—the product of experience and sympathy—which recognises that boys must be led on very gradually, and that to recommend books of a better class too early is apt to discourage the taste for reading altogether. One librarian of long standing has told us that he is only just beginning to learn, after many years of this work, what can really be done towards helping boys to make a true progress in the choice of books. He points out to us that it is of no value to say that a boy of a certain age should read and enjoy a certain book, and the comparison must not be made between one boy and others of his age, but between a boy as he now is and as he was at earlier stages of his life. For this purpose it is essential that a record of books taken out should be kept, and at times it is very helpful to trace in the choice of books which a boy makes, whether there is any real continuity in his progress or not.

In addition to the school library there are many other agencies employed by preparatory schoolmasters for encouraging this taste for reading. In many schools there is a reading scheme made out with test papers and prizes. Such a scheme is rendered the more feasible owing to the small price at which all standard books can now be bought. If, for instance, a Waverley novel is

one of the books included, it is possible for each competitor (of course the whole system is voluntary) to purchase a copy for sixpence. Such a scheme strikes us as likely to be of real value towards the attainment of our object. A boy who begins by reading the set books in the hope of a prize, will learn to read them for their own sake. It is the first effort that requires the stimulus.

Again, a regular system of reading aloud to the boys is very common in preparatory schools, and with the exception of a very few dissentients such a system is declared by all who have tried it to be of great help in giving boys their first taste for books, and in introducing them to works (both prose and poetry) of standard authors. The reading aloud of well-chosen poetry is always appreciated. The older boys begin to take a real pleasure, for instance, in the "Idylls of the King," while almost all like to listen to Macaulay's or Aytoun's *Lays* or selected poems of Rudyard Kipling. In this context we cannot refrain from mentioning Henry Newbolt, with his "Admirals All" and other delightful ballads. Again, the reading aloud of some good novel with a long-sustained plot is probably the best corrective for that impatience which we have before mentioned, as engendered by the constant perusal of short stories. "Hereward the Wake" is declared to be among the best for this purpose. On this matter a suggestion has been made to us, that there is the greatest possible necessity for urging parents to do what they can to promote this love for real literature in their sons. It is believed that they, far more than any schoolmaster, can help towards this end, if only they will make a point in the holidays of reading with their boys some standard works, as, for instance, the *Waverley Novels*.

Before closing, we must touch on two other points, on which information has been sought from preparatory schoolmasters—information which it was thought might interest some. Inquiries have been made as to whether any restrictions are placed upon the admission of newspapers and periodicals. On this point there appears to be a strong consensus of opinion. It is agreed that, for boys' use, choice should be made of a newspaper which omits detailed police news. There is, too, an almost universal rule as to the exclusion of the low-class so-called comic papers. It seems clear to us that such papers have a demoralising effect, if only from their excessive vulgarity. But here, again, little can be done without the co-operation of the parents.

The other question alluded to, as to whether any restrictions are placed on books that may be read on Sunday, is answered in the negative by almost all. The prevalent opinion seems to be that any book fit to be read in the week is fit also to be read on Sunday, and that it is as unreasonable to restrict a boy's reading on Sunday as it would be to restrict the topics of his conversation. A few masters, however, do advocate a change of diet on Sunday.

There are no doubt many other points connected with the private reading of boys that might with advantage be discussed.

Nothing, for instance, has been said of the direct influence of such reading on their own literary style, nor have we considered how far such private reading should be utilised to help on their ordinary school work; but we wished to bring out the one point, which we believed to be vitally important, namely, the necessity for the development of their taste for reading; for if this taste is not acquired, we are agreed that one of the surest sources of happiness and one of the most refining and inspiring influences will be lost to their lives.

Amid so many adverse conditions one is tempted at times to despair, the more so, when we hear of the growing prevalence of magazine societies, and see men and women of apparently good education given over to this love for the poorer ephemeral literature of the day. If that is so with them, how will it be with the rising generation reared from childhood amid this countless host of magazines and short stories. There are, however, on the other hand, several reasons for good hope; one of which, the cheapness of standard works, has already been mentioned. Much of the finest literary quality is now offered at a price within the means of all, and we believe that at any rate in the so-called working classes there is a great prospect of increased culture, and of increased happiness owing to this alone. But for our boys, the one real reason for hope seems to us to lie in the fact, that very many, parents and masters alike, are beginning to awaken to the vital importance of this question, and thoughtfully to realise the special dangers of this age. If such thoughtfulness leads to a hearty co-operation, as we believe it will, we are confident that the true and healthy development of this taste for reading will be, in spite of all difficulties, most effectually promoted.

W. DOUGLAS.

A DAY IN A BOY'S LIFE AT A PREPARATORY SCHOOL.

A boy's life at a Preparatory School is his first plunge into the world. Hitherto his circle has been limited to relatives and friends. If his individuality is not partially lost amid the crowd, it is likely that, first, his imitative faculty will lead him to shape himself in accordance with another than his own pattern; and that, second, the dread of the conspicuousness which is a sure result of eccentricity will cause him to avoid any tendency he may have to become strongly unlike his neighbour. For this reason the preparatory school should endeavour as far as possible not to copy the public school, but rather to make the life there a period of transition. It seems to the present writer that in many ways the preparatory schools have consciously or unconsciously felt this, and that the criticisms directed against them on the plea of "coddling," etc., lose sight of this important fact. There is a tendency to forget that on entering the school the boy is but a child. It appears proper to state this at the outset, as otherwise the reader is only too likely, if he himself is not a preparatory schoolmaster, to judge the boy's day by the standard in vogue at a public school.

Tommy or Jack, when he comes to a Preparatory School, has to get up for breakfast at 8. Hitherto in his nursery he has probably been helped to dress; here, with some five pairs of eyes watching him, he must dress, tie his own tie, and be down promptly with hair brushed and hands washed.

At breakfast, which does not probably differ much from what he is accustomed to at home, he has to restrain his conversation somewhat, not through any written law, but simply because everyone is not specially interested in him and his doings. After breakfast there is a run in the open air for a little, and then prayers, and school at 9.

School consists of a lesson of about forty-five minutes. Here he has ten companions. The master must be called "Sir," and the boy cannot feel quite as all-important as he was in the schoolroom at home. In his work the competition is probably the most novel point to him. Work gains or loses him places, and he finds an added zest to his lessons. This, however, is not the end-all and be-all of his existence, as he finds as a rule nowadays (to which, perhaps, there are still too many exceptions) that he is praised not for the place he gains so much as the amount of energy he shows. Marks in the Preparatory School are not the sole test of his merits. He soon finds he has to obey the master, as any tricks he may be inclined to play may make him the laughing-stock of the form. At the same time, as a general rule, the cane, impositions, and punishments are not so

frequent as he has been led to believe by books of schoolboy life. The lesson ended, there is a short interval of some five minutes, during which he plays in the open air, and then school again. There are probably about four lessons in the morning, with intervals of play. These lessons are varied, a lesson during which he writes Latin following a *vivâ voce* lesson in geography or history. Before dinner he has gymnasium, or perhaps a lesson in carpentry.

Dinner is at one o'clock. It is the chief meal of the day, and, besides a plentiful supply of meat, there are vegetables and either fruit tarts or puddings. The boys find they can talk freely, and it is generally the most lively meal of the day. After dinner the boys all change their clothes, and put on football dress. The game is thoroughly enjoyable to boys as a rule, though at some schools it is apt to become monotonous unless varied by other amusements. It therefore happens that one afternoon or perhaps two a week are devoted to hockey or drill, or the carpenter's shop. The usual plan is for half the time to be given to the carpenter, half to the drill sergeant. Drilling is made as interesting as possible, and in a few schools the introduction of the rifle or carbine has made the boys into regular cadet corps. If the school, as generally happens, is in the country or by the sea, there are occasionally walks and runs to vary the amusements, and these if judiciously managed are often the favourite days with young boys. If snow is on the ground the whole school can, with a few toboggans, have a really delightful time, and the wetting they may get is harmless, if a change of clothes is, as is usual, the fixed rule.

About a quarter past three school begins again, and there are from two to three lessons in the afternoon. In some schools there is a light afternoon tea about four, and a supper at 6.30, but more often the supper is the only other meal.

In the afternoon lessons are varied and divided by intervals, as in the morning. The first afternoon lesson lasts from 3.15 to 4, followed by an interval of a few minutes, and then school from about 4.10 to 4.55, and the last fills the space between 5 and 5.45. In winter the boys read to themselves, go into the gymnasium, play games, or talk till about 6.30, when supper comes.

Supper consists of fish, bread, butter, jam, with cocoa or perhaps tea. After supper the quite young boys have no more work to do, and can play games, or read or talk till bedtime, which is 7.45. The older boys have from half an hour to an hour to prepare their work for next day, and go to bed at 8.30 or nine.

Two days a week are half-holidays, and on these afternoons there is often a match arranged with some other school. This is a very popular institution both with those who play and those who watch. On other half-holidays, rambles with a master, or a run over the country, or, if at the seaside, along the seashore may be arranged. In the evening of one of the half-holidays there is often an entertainment, a lecture with lantern slides, or perhaps a school concert.

In the summer term cricket takes the place of football. This term is generally the most popular. There is not time to get tired of cricket in thirteen weeks; the term is by far the best as regards weather. There is bathing and swimming in the river, or the bath, or the sea. A slight rearrangement of time-table gives longer out-of-doors amusement. The walks or rambles on half holidays become far more interesting. You can lie in the heather, catch butterflies, collect the thousand and one things which boys delight to collect. Occasionally, too, there may be an expedition with a pic-nic to an old ruin, or an island near the coast, and this is the day when the young boy comes out in all his natural glory. It is on such a day that the master gains a better knowledge perhaps of a boy's true instincts than at any other time.

Such is the bare outline of the kind of life Tommy finds at a preparatory school. It is difficult to give a vivid idea of what he himself feels about it all. Boys live very much in the present. They are sad when school begins, glad when breaking-up day arrives; but on the whole are happy from day to day, while the term lasts. If anything, the charge against the best preparatory schools is that boys are too well looked after there. It is difficult to imagine that boys can be too well looked after, but the phrase probably means too much supervision. This appears to the present writer to depend more on the spirit of the place than the actual presence or absence of a master. In old days ushers were often refugees from other professions, and their social standing was inferior. Their attitude towards the boys was different. Nowadays, the presence of an assistant master in a crowd of boys at a preparatory school is often less of a burden to the boys themselves than that of a prefect at a public school. Not that the master has less respect paid him, but there is more love and less fear, so that the boys act more freely and naturally. At the same time, there is no doubt an evil far too common—namely, the continual supervision by some master of all the boys. In some schools even the dormitory has its masters' bed actually in the room. That this system of constant supervision is unnecessary and even harmful seems quite clear to the majority of schoolmasters, and in so far as it exists it is likely to die a natural death. There still remains, however, the charge that too much is done for the boys, and too many difficulties are removed. This must depend largely on the character and spirit of the headmaster and his colleagues. In breaking in a colt the skill of the teacher does not remove difficulties, but teaches the animal to overcome them and face them with spirit. In the same manner the skill of a teacher with only ten boys, instead of as at a board school with fifty boys, should not lead him to remove the boys' difficulties, but rather to give them greater courage and independence. The present writer once asked a Board School teacher to take a class of ten boys in his school for a week. The report would have astonished critics, who really believed in this alleged lack of independence. He found fault with the writing not on the

score of untidiness, but of individuality; he would have preferred greater similarity and one type. This, indeed, was the tenour of all his criticisms. He declared it was virtually impossible in large classes to do so much to draw out the individual effort. It would take too long to reproduce his remarks, but they tend to prove that the effect of small classes and individual supervision is not, in a properly conducted school, to cramp, but to stimulate individuality and independence.

In short, a boy comes to a Preparatory School, and in its ordered, systematic life finds his first lessons in discipline. He has to be punctual, he has to work hard and play hard, but his first experience should be, and generally is, so directed that his individuality is not lost in a machine-like routine.

The development of habits of industry and punctuality is attained not by multiplicity of rules, and pains and penalties for breaking them, but rather by recognising that different methods are suitable for different characters. The very fact of the paucity of numbers makes it easier to deal with the individual than the mass, and if the master does not succeed in developing the idiosyncracies of the boy, the fault lies either with himself or the boy, and not with the system of the school itself.

It seems to the writer that the Preparatory Schools are valuable to a very large extent owing to the fact that the numbers are small, and the aim is to influence the unit rather than the aggregate.

At the age at which he comes under the master's influence a boy is very impressionable, and the aim should be not merely to enable him to take a good place in a Public School, but to implant an interest in physical and intellectual development.

This is generally successful physically; but it may justly be doubted if the zest in intellectual things is quickened to a proportionately successful extent.

This is all the more curious because there is no physical examination awaiting him at any public school, whilst every such school has an intellectual examination. It would perhaps be going too far to say that the whole fault lies in the present system of examinations, but it does seem as if much of the intellectual food placed before boys at this age is of such a kind that it cannot be generally assimilated. To put it shortly, the entrance examinations run on parallel lines with the classical scholarship examinations, differing not in kind but in degree. For this only a small percentage of boys are by nature fitted. A wider English vocabulary, a sounder knowledge of history and geography should be insisted on. Not less Latin perhaps, but no Greek, except in the case of a few, who are confessedly scholars. In modern languages, one only, and in that a knowledge of vocabulary rather than of grammatical analysis. It is scarcely within the scope of this paper to say more on this subject, but allusion to it seems necessary, as in a boy's day at a Preparatory School much of its reality and freshness is involved in the subjects at which he works.

P. S. DEALTRY.

SCHOOL MANAGEMENT IN PREPARATORY SCHOOLS.

"Optimum elige : suave et facile illud faciet consuetudo."

School management is a wide term ; it may be made to include every topic which the schoolmaster as such is bound to consider. On the other hand, it may be reduced to the mere mechanical routine of hours and the details of hygienic necessity. If this paper indulged itself, it might expatiate over the whole ground of the volume of which it is to form a modest part, whereas if it confined itself to bare automatic details it would probably touch upon the exact subject of another paper, and would miss the very important material which it should endeavour to expand. The difficulty of limits becomes clearer when we reflect that in the case of every institution the question of apparatus is from one point of view a *spiritual* question, and that this is most peculiarly the truth where you are dealing with the education of the very young. There questions of dress, of meals, of hours of recreation and of study—questions at first sight of mere mechanical detail—become of deeper moment because of the immature, growing state of the subject. It is always, for example, difficult to separate the brain and the stomach, but never more difficult than in the case of young boys.

While recognising, then, this vagueness of subject, and the indefinite, almost imperceptible manner wherein that with which we are more exactly concerned shades off into a neighbouring province, I intend in this essay to confine myself more definitely to the side of school management, which is less directly educational of mind and more intimately concerned with personal character. I shall lay stress on the scope we may allow to the individual influence of older over younger boys, upon the degree in which the masters may and must distinctly interest themselves in their charges, upon the limits of restraint and of liberty out of school.

In a less degree we shall be concerned to discuss the more obviously material questions of *exerts*, of *food*, and of *pocket-money*, as reacting upon the routine and discipline of school-life, and affecting the development of mind and will, which is our chiefest concern. I shall illustrate these topics by reference to existing practice, and where I disagree shall emphasise the points of difference, and at the same time endeavour to show why methods adopted by some authorities seem to me either unnecessary or distinctly mistaken.

To begin, then, with the relation of boys to one another, and of masters to boys.

Nothing can be clearer to anyone who has concerned himself with this kind of education than that a Preparatory School cannot be treated merely as a miniature Public School.

The Public School, seen from inside, may itself suggest doubts whether its boys are sufficiently under the ken of the masters, whether the liberty of the seniors is not mischievously akin to licence. But, however that may be (and let me not for one moment be supposed to favour anything approaching a system of surveillance), it is impossible to treat boys, say, of thirteen, who are relatively big, as *really* big, to thrust a weight of responsibility upon them, and to expect them to be equal to it. In other words, though it is eminently desirable to stimulate the moral courage and sense of responsibility of the older boys, it will lead to grave misfortune if we trust them too far or too freely.

Again, in the matter of masters and boys, it must be borne in mind that the attention and vigilance bestowed upon small boys is not by any means due to their bad intentions, but in a great measure to their want of power and initiative. Just as in school the smaller boys cannot get on if left to themselves; so in hours of recreation and amusement they are unable, with the best will in the world, to keep themselves going. There may, it is true, be individual exceptions, but on the whole the small boy is resourceless, except in directions in which it is better that he should not be left to develop his resources.

In fine, paternal interference in many directions—grand-motherly care if you will—is absolutely essential for small boys. This kind of control and supervision—the word is disagreeable and inapplicable—may be disguised in a great measure and is better if not emphasised; but, on the whole, it may be confidently asserted that boys of this age do not regard themselves as suffering from supervision and restraint; they are happier and freer if looked after and directed; in fact (granted a wise choice of masters and matron, and an original wise father and mother) they are, like the ordinary British citizen, unread in Auberon Herbert and Herbert Spencer, quite blissfully unaware of the degree to which they have been spoiled of their “natural” liberty. Upon this point it is not too much to say that the expert opinion is absolutely unanimous. In most schools of the kind we are discussing the masters have been chosen largely for their power of understanding boys and for their sympathy with them, and accordingly they are able and anxious to lay aside the master as much as possible, and to become the comrade. Let me not be misunderstood. The master is not a kind of intimate “chum” of the boys, nor a more intelligent “ragster.” What I mean is that the boys are constantly rather in the society of their masters than under supervision, accustomed to look upon them not as ever-vigilant policemen or tyrants, so much as sympathetic guides and just friends. This is a matter upon which more need not be said in theory, though it be all important in practice.

To resume, it seems wise that masters should be nearly always among the boys, especially among the small ones, not so much to supervise as to be ready to help them in a hundred ways. If we allow a slight latitude for circumstances, existing

practice seems to be without exception somewhat as follows:—Masters are always in the room at work and at meals, and one (by turns) is ready at hand at all times of indoor leisure. Especially is he on the spot in lavatories when changing is going on, to prevent dawdling and to check that weakness of the flesh which water almost always provokes.

So, in the dormitories, a responsible master, or the matron, is near at hand, and the boys are accustomed to expect—not necessarily with any guilty dread—the entry of the master or the matron, or the master's wife. In some schools assistant masters sleep in the larger dormitories or sets of cubicles, but in the majority the dormitories are kept by older boys only, while in some schools the headmaster reserves the superintendence by night entirely to himself or to responsible women.

At games the custom is for masters to play with the boys, or to be present to instruct them—at any rate, to be on the horizon. Finally, during outdoor recreation, it is essential to exercise a proper amount of watchfulness against persecution (of which more presently), and various forms of carelessness, such as lying on wet grass, exposing the head to a mid-day sun, *et hoc genus omne*. Before we leave this question of masters' relation with boys, I should like to advert shortly to a point upon which there is a considerable difference of opinion. I refer to the question of smoking in the presence of the boys. Headmasters are agreed, with few exceptions, that it is best in Preparatory Schools to dispense with the formality of the academic cap and gown. It seems to be unnecessary and cumbersome. Yet a large majority forbid or discountenance smoking by assistant masters in the boys' presence. I confess that my sympathies go wholly with the minority. This strictness of custom seems to me to be foolish, illogical, and irksome. Boys whose fathers, almost one and all, smoke, do not connect the practice in any way with self-indulgence, but regard it as an adjunct of age and the glorious state called "grown up." Anyone who has enquired into the subject will know the extraordinary ideas small boys entertain of their preceptors' ages. They probably regard them—even the youngest—as old enough to be their fathers, if not their grandfathers, and they judge their actions accordingly. It cannot then, we hold, be in the boys' interest that the habit is hidden from them. They regard it as an inseparable accident of maturity, and it is good for them to realise that their masters have a privilege which they have not. Unless, then, it be in the interests of the masters' own asceticism, I think very strongly that they should be allowed perfect liberty in the matter. I venture to think that the feeling against smoking is one of fashion and ill-considered prejudice. There is indeed a time for all things, and it goes without saying that every headmaster should be able to choose his men better than to get hold of the dreaded "short black pipe man," who does nothing but abandon his duty to the pleasures of a smoke and a lounge.

The consideration of the connection of master and boy

naturally brings us to the question of punishment. Here, again we must remind ourselves that we are dealing with a special material. We do not legislate either for the mature man or for the incorrigible offender. The established practice seems to be based wisely on a desire to avoid punishment, as far as possible, in all minor offences, to make it, when resorted to, certain and effective, but not chafing or injurious to health (and calligraphy), and in graver offences to use corporal punishment, firmly and swiftly. Two points in particular call for notice. One, that in my opinion some offenders undoubtedly need and certainly profit by corporal punishment. Let me not mince words on this topic. To the bully, to the beastly, to the habitual idler, nothing brings home his offence so quickly and so effectively as the wisely-determined rod. Opinions differ no doubt on this point, and discretion is occasionally abused, but, on the whole, the value of such chastisement is acknowledged by most men, and is by me taken as an axiom. The cases in which it is peculiarly needful to use the rod seem to me to be persistent idleness, *conscious and deliberate* lying, indecency, and bullying. It may seem at first sight that the last does not call for notice in a Preparatory School, but even a short experience will convince that little boys of from nine to ten years of age are much prone to persecute and annoy their fellows, and it is with such that the *argumentum ad baculum* proves especially convincing.

The second matter to which I would particularly draw attention is that common one of lying from terror. Nothing, in my opinion, could be more wicked, nothing so ill-calculated, as to punish for this prevalent offence. The cure will come, in nearly all cases, with time and reason, but the trick cannot be eradicated by chastisement which only avails to increase the child's fear. It is the practice of some masters to endeavour after a scheme by which the punishment "fits" the crime. Boys, for example, who are noisy over their food, are made to sit quiet and alone, or to stand upon forms. This kind of punishment is said to be effective; but, let alone its impracticability for most offences, it seems to me rather calculated to irritate than to correct, and in any case likely to react unfavourably on the offender's physiological substratum, which is, after all, in many cases to blame for these eccentricities. Punishments which tend to confine boys within walls, to curtail their instinct for expansion, to tire their brain, or to cramp their handwriting, are to be deprecated. Fines (except to replace injured library books or to pay for wanton damage), are a grievous mistake, as well as obviously unequal. Many schools use them for small offences, such as untidiness, trespass upon grass, redemption of impounded books, etc. etc., but to me it seems undesirable to mulct boys in money, even for these trivialities. It cannot be equal, it is irritating, and if I may say so, unnatural.

Where punishment is necessary, the practice of most schools seems to favour the setting of a small amount of round-hand copy to be done well and in a limited time, rather than a large quantity to be incontinently scribbled: the imposition of a short

passage of "rep," or Latin vocabulary: the curtailment of small privileges, such as use of the library: or the infliction of some out-door task, such as drill or rolling. Such out-door punishments are not always suitable, but where they are it is preferable to use them in the interests of health. Their danger lies in excess of quantity, which would exhaust and perhaps injure the boy's physique. In the matter of drill, there is considerable weight in the objection which has been urged to the association of punishment with a corporate act which is both an expression of and stimulus to unity and unanimity. Punishment, then, is to be unusual, prompt, and not injurious to health and spirit. This is our ideal. But if punishments of an irritating dame-school order are to be avoided, surely any system of rewards for good conduct is to be emphatically condemned. I believe it to be a grave mistake to let boys think of good behaviour as something unique and laudable, a thing to be concretely rewarded, and I most heartily detest the association of merit and duty at this early age. Boys are, perhaps, keener than anyone upon sincerity, and in their hearts—at least, the best of them—scorn the notion of doing good with a view to material gain. Even the stern old method of an ever-present sanction is surely to be preferred to the novel system of the moral law sweetened by the sugar-plum.

In the matter of liberty there is an obvious line to be drawn between country and suburban schools. Most schools away from towns have large grounds or a neighbourhood where a certain range of liberty is possible; in towns and their environs it is plainly necessary to institute bounds and to exclude the temptations of shops and slums. With the necessary restrictions the principle most men follow is to allow an increasing degree of liberty to walk in free groups as boys grow older, more sensible, resourceful, and trustworthy. In the case of younger boys the chief objection to the indulgence is in the perilous tendency to sit or lie on wet grass, or to climb impossible trees and walls. At school, too, dangers attach themselves to freedom, which at home, where a boy's "people" are known, hardly exist. This is especially true of the neighbourhood of cities where tramps and other low characters abound. A practical difficulty which restricts liberty is also the fact that the day is cut up into hours for school, games, carpentering, music, and so forth, until very little time can be found for roaming afield. The practice of most schoolmasters seems to lie in the direction of a generous amount of liberty, curtailed necessarily by the above-mentioned conditions.

In the school grounds masters are always "about," though not in such a way as to suggest to the boys that they are in any sense being "watched." The seniors are allowed to walk out in groups, if they ask leave, at any time when it does not interfere with games, and even smaller boys at times enjoy this privilege, according to their character.

As to the undesirableness of "excats," opinion is almost unanimous. Many masters do not allow them, or at most do so

grudgingly under pressure of the fond parent, who here, as in other connections, is the real fount of difficulty. There is possibly this in favour of exeats, that a long term tends to take the heart out of very little boys, while in some cases they may serve to keep alive a wholesome home influence, but in general they are likely to unsettle the mind and disorganise the stomach. Further, such absentees are, of necessity, exposed to the risk of contact with epidemic germs. Upon most grounds, then, especially if a school is in the country, exeats are to be discountenanced.

We have already alluded to dangers caused by the neighbourhood of shops. This brings us back to a point of some interest—the great matter of commissariat.

The actual daily meals are really a question of hygiene, and in this subject authorities like Dr. Clement Dukes must give the final word. It may be well, however, to mention what seems to be the usual course. The bulk of schools evidently believe in a liberal *régime* with a considerable quantity of meat. Here and there a reactionary expresses his sentiment against the modern tendency to excess, but on the whole we lean to more variety and abundance than our Spartan forefathers.

The average may be taken to be three square meals, breakfast, dinner, and tea, supplemented by some kind of light refreshment (*a*) before early school; (*b*) between breakfast and dinner; (*c*) either about 4.15 or just before going to bed. In the case of the abnormal boy the mother or the physician must decide.

A much more difficult point in school management is that which comes under the general and suggestive title "grub." Here the unanimity of opinion is against the hamper, and in the direction of the limited tuck shop. There is a struggle to get parents to follow express advice in this matter, but many masters avoid the problem of the rich boy's hamper by throwing its contents into the common stock, and dividing it amongst the boy's table companions, after confiscation of the more infernal compounds. A rich snob may do a deal of harm by his grand hamper and his abundant pocket-money. On the other hand absolute prohibition of "grub" seems unwise. We quite believe in letting boys get sweets and "tuck" somehow. There is a craving for it which makes us feel that it is a part of Nature's mysterious design. "*Natura non nisi parendo vincitur.*" And therefore it is best to organise and restrict, not to forbid, the instinct. My own plan is to have a sale of grub twice a week by the matron, in the house. The modest sum of twopence or less may then be disbursed, and one can be sure that wholesome goods are provided. The profits, if any there be, may go to some institution—say the School Library.

With regard to pocket-money, it is wise and necessary to strongly discountenance a boy's return with a large sum. At the same time it exposes a fellow to temptation to be wholly deprived of ways and means. It is a good thing to have a bank where boys make deposit at the beginning of Term. Threepence

a week may be added to the individual's balance. Boys who draw out more than a small sum should be asked how they intend to spend it; but naturally less questioning on this head is put to the senior and more responsible boys. Borrowing and lending money are strictly forbidden; but the question of buying, selling, and "swopping" is most difficult. The tendency is to forbid it altogether, except through a responsible medium. It is obviously a matter which lends itself with ease to grave abuse. A possible and, in my opinion, safe solution is to sanction the practice under the express condition that the traffic shall be done solely through the headmaster, or through some one responsible assistant master; and a breach of this rule should be understood to merit condign and possibly corporal chastisement.

It is in matters of the kind last dealt with that one may find valuable help in the support of the elder boys. If they have learnt to count over-reaching in such matters underhand, mean, and ungentlemanly, and at the same time know that they are relied upon to set their faces against any secret commerce, much of one's difficulty is removed.

Upon this serious question of the responsibility of the older boys, I am aware that masters do not wholly agree, whilst in schools there is considerable difference of practice. As was pointed out in the beginning of this paper, it is impossible to treat small boys as if they were in every respect mature beings, so that any measure of success which a monitorial or prefect system may have depends upon a thorough realisation of the peculiar conditions, and a careful application and adaptation to them. The interest of this point justifies a somewhat lengthy discussion, and will appropriately bring the subject of school management to an end. Personally, I agree with the many schoolmasters who believe that even among little boys from 8-14 years of age, it is desirable and possible to enlist on the side of law and order the seniors and those who, from skill in games or unique character, are naturally prominent. This has to be done by finding little privileges, and imposing little responsibilities, in the way, for instance, of checking nascent irregularities, acting as your spokesmen now and again on minor occasions when you wish to make matters known to the school, but yet perhaps do not think it worth while to call them all together specially. My own method is to put a certain number of boys in the two highest forms—and especially one boy who is known as captain of the school (often, but not necessarily, the head boy in the top form)—on a rather higher footing than their fellows. With them may be incorporated two or three others lower in the school, who from athletic skill or special soundness of character are seen to have attained a position of influence. These are chosen to be captains of dormitories, and to some extent organisers of games: they are allowed at times to use bicycles, to go walks in the country side, and are taken before others to see cricket matches, regattas, &c., &c.

They are reminded now and again of their position as one of

responsibility—and as a rule they show themselves equal to the trust reposed in them. But it cannot be too often insisted that all this must be done with grave care and caution. The evils to which an official class is prone are not, alas! wholly absent from English Preparatory School life. Little boys are liable to become tyrants, to abuse their small measure of authority, and even to throw their weight on the side of “wrong and robbery.” It is one of the most disappointing things in the life of a school-master to find that the upper boys, in whom he has put most trust, have proved themselves incapable or unworthy. But here, as in worlds outside our scope it is the men who make or mar the institutions, not the institutions the men. There will be failures, and it would be idle to pretend that any system has immunity from them. On the whole—and with due care—the practice has, in my experience, worked well, and upper boys at this age have shown themselves (due allowance being, of course, made for the difference in their respective ages and responsibilities) fully the equals of prefects at Public Schools. Granting the possibility of working some such system, its beneficial results are obvious. You have on your side the embodi-ers of the best part of the tradition of your school. You have what may be the most dangerous section of your community definitely committed to the right. The gain to administrative ease is great, but one may say, without exaggeration or false enthusiasm, the gain to *morale* is infinite.

J. H. WILKINSON.

APPENDIX.

The following Appendix summarising the replies sent to the queries has been prepared by Mr. A. J. C. Dowding.

1. *Do you assign any powers, responsibilities, privileges, to the Head of the School or to any other members?*

58 Yes,

18 Only in dormitories.

41 None, or practically none.

In the above classification no account has been taken of any mention of powers, such as a boy holds when captaining his side, or of responsibilities, such as the custodianship of a school library, to which no one would take exception. The endeavour has been to ascertain how far the principle of investing little boys with authority over their fellows in their every-day life is carried out in actual practice.

The principle is recognised in fifty-eight schools. Power is officially delegated to the captain of the school (not necessarily the head boy), or, as is very much more usual, to a set of leading boys, who are generally called monitors or prefects. The extent of the power thus delegated varies greatly in the several schools. In many cases it is evidently quite trifling; on the other hand, we find that in some instances these little officials are authorised to chastise, fine, or report offenders, and in one case they are described as "corresponding to Public School prefects with modified power."

Many of the Headmasters who object to the principle expressly state that they encourage their leading boys to maintain a good tone and to set a good example themselves. As one of them puts it, "*noblesse oblige* is impressed on the highest boys, but we have no monitorial system."

The conditions of dormitory life are exceptional. *Necessitas non habet leges* may perhaps be fairly pleaded by those who, objecting to this principle in general, yet admit it here.

The limited space at the command of the contributors has of course precluded any exhaustive treatment of this interesting subject. Perhaps I may be allowed to attempt to put the case as I imagine that it appears to those who disapprove of the monitorial system; but it must be understood that I am far exceeding any authority that can be derived from their remarks.

"We all admire the boy who uses his influence on the right side generally and his fists in emergencies; it is the most important part of our business to create such a character. To invest him, however, with official power and title is to lessen the efficacy of his action, which is greatest when it is most spontaneous.

"Moreover, there is something suggestive of priggishness in the title of monitor, something unnatural in this very young censor of morals. We have to look on to the time when he will leave the society of fellow monitors for that of fellow fags, and will regard school-life from an altered standpoint. We must reckon with the probability of a consequent reaction, especially in the case of the natural poucher, who, having temporarily and immaturely worn the velveteens, may revert to his original leanings.

"No consideration of benefit to the community justifies us in sacrificing the individual; yet it is doubtful whether the community do really benefit. Little boys seldom possess sufficient moral courage to act as they ought to do in the face of opposition; it is unwise to repose in them trust, any breach of which must be most unedifying.

"Lastly, equipped as we are with a full complement of officers, men whose special merit it is that they live and move among the boys on a footing of intimate friendship, what need have we of these little lieutenants?"

The privileges which are mentioned as the rewards of monitors, etc., take the forms of (a) exemption from supervision, more particularly in their country walks; (b) the free run of the library or extra sitting-room; (c) extra pocket money; (d) a prior claim when some treat, such as attending a big cricket match, is open to a limited number.

2. *What forms of punishment do you adopt?*

Apart from corporal punishment, detention, and fines, which form the subjects of separate questions, the following are mentioned, and they are placed in order according to the frequency with which they are named.

- i. Penal drill.
- ii. Forfeiture of treats or exceptional half-holidays. This is usually dependent on a system of conduct marks; in a few cases the sins of individuals are visited upon the multitude, in order that "all may work together on the side of order."
- iii. Deprivation of luxuries.
- iv. Rolling the cricket-ground.
- v. Something to suit the crime.

Do you resort to corporal punishment, and, if so, for what kind of offences?

119 Yes.

5 No.

Of those who resort to corporal punishment there is only one who advocates a wide use of it.* Several state that it is administered by the head-master alone; it would have been interesting to learn whether its use is ever delegated. Four approve of the birch but object to the cane.

The general drift of the answers implies that corporal punishment is used very sparingly, and is reserved for very serious offences: the latter I have categorised according to the number of times they are named:—

Persistent idleness	-	-	-	-	-	69
Lying	-	-	-	-	-	40
Grave moral offences	-	-	-	-	-	36
Insubordination	-	-	-	-	-	35
Cheating or stealing	-	-	-	-	-	14
Bullying	-	-	-	-	-	14
Ungentlemanly conduct	-	-	-	-	-	10
Breaches of dormitory rules	-	-	-	-	-	8
Wilful mischief	-	-	-	-	-	1

One uses it "chiefly for the first small wilful disobedience," and three are of opinion that it should never be used for grave moral offences.

Do you impose any limits on "keeping in"?

112 Yes.

4 No.

The methods by which detention is limited are as follows:—

- (a) Forbidding it during the hours of organised games.
- (b) Appointing for it certain fixed hours during the week, and excluding all others.
- (c) Imposing a maximum limit—say half an hour a day.

* "If a boy can be kept in without injury it shows that boys who do not get detention are not worked so long as they profitably might be. On the contrary supposition—i.e., that hours are already fully long, detention must mean poor work and further detention. Chiefly on these grounds I conclude that the shortest punishment is the best, and it should generally take the form of mild personal chastisement. Punishments more trifling in form are lightly given, and tend to cause a regime of frequent punishments, especially at the hands of junior masters. To meet the case of super-sensitive boys, there is an option of detention except in the rare cases of serious offences."

- (d) Requiring the master personally to superintend the execution of all impositions which he may set. (This simple method will be found efficacious in all except acute cases of excessive zeal on the part of junior masters.)

One headmaster manages to substitute voluntary for compulsory detention.*

Do you set "lines"?

22 Yes.

99 No.

In the interests of caligraphy "copies" have become more usual than "lines." Repetition lessons are another common substitute: they are irksome to the master who has to exact them, which may be a gain, but they are very exhausting to certain boys. A few headmasters recommend arithmetic sums instead.

Do you use fines?

86 Yes.

36 No.

In a dozen of the former cases the word "fine" may be hardly appropriate, the penalty being limited to reparation for wilful damage. The majority, however, impose regularly fixed fines, mainly for the damage or loss of books, and for untidiness. Some use a wider fine-tariff providing for unpunctuality and other faults: thus, in one instance, we find that "dirty hands" are assessed at one half-penny, while "skirmishing in class-rooms," or "going on the grass," costs sixpence. In another case the tariff principle is still further developed.†

Unfortunately it is impossible to entirely dispense with punishments, but there is not wanting evidence of a desire to do without them so far as is possible. We should most of us agree that the best master inflicts the fewest penalties.

3. *What supervision is exercised by the masters?*

(a) *Out of doors, at games, and at times of leisure?*

(b) *Indoors, at work, at times of leisure, in the dormitories?*

Supervision of organised games out of doors and of work indoors is practically universal.

At times of leisure (both indoors and out of doors) —

In 56 schools the supervision is continuous;

In 30 schools it is not continuous, but a master is always "within hail;"

In 29 schools it is not compulsory on the masters; indeed, in six of these it is discouraged.

As a rule, the assistant-masters have nothing to do with the supervision of the dormitories; the management of these the headmaster retains in his own hands, being assisted not unfrequently by his wife, and always, of course, by the school matron. Boys understand that they may expect a visit from him at any time, but there is no sort of continuous supervision: each room is under the charge of a boy-captain, who is responsible to the headmaster.

In some schools assistant-masters undertake the supervision of dormitories until the time when lights are put out; in only one instance is there mention of a master's cubicle in a boys' dormitory.

* "A boy can redeem a 'turned' lesson by saying it over again of his own free will at a time appointed by the master. In consequence detention becomes useful and voluntary instead of involuntary and almost useless." The boy recovers some lost marks if he succeeds in saying his lesson.

† "I have an arranged system: most punishments apportion so many 'units' to the boy, which can be worked off in a variety of ways, e.g., payment of one halfpenny—ten minutes' extra work—silence at meals, etc., etc. On the other hand I have a system of 'stars' for excellence in work or play, which can wipe off 'units.'"

4. *Is there any extra coaching for specially clever or dull boys?*

38 No.

74 Yes.

Few contributors state whether this coaching is given to clever or to dull boys. From their replies it would appear that it is mainly intended for the dullards; but the examinations for Entrance Scholarships and for the Navy are both mentioned as causes.

5. *Do you exercise any restriction on the amount of a boy's pocket money, or on his spending it? Have you a boys' bank? Do you give your boys a weekly allowance?*

78 limit the amount of pocket money, mainly by advice to parents.

25 do not.

80 exercise restrictions on the spending of pocket money.

7 do not.

88 have a boys' bank.

25 have not.

80 give weekly allowances.

31 do not.

These questions may be taken together, as they are to a great extent interdependent. The boys' bank is the key of the situation, and the usual course is as follows:—No fixed limit is set upon the amount which a boy may bring with him to school, but parents are advised to observe moderation, and 10s. to 20s. seems to represent the usual range. The sum, whatever it may be, is at once deposited in the school-bank. During the course of the term the boy may draw upon his deposit whenever he pleases, but must obtain the approval of the authorities for any purchase which he may desire to make. In these circumstances there is little or no occasion for issuing weekly allowances.

The advantages of this system, which, with minor modifications, is usually adopted, are many; purchases of tuck can be closely regulated or entirely stopped; the boys cannot borrow or lend, buy or sell to each other; servants, and possibly others, are freed from the temptation of appropriating moneys which little boys are apt to leave about carelessly. Moreover, boys receive the guidance which one contributor declares to be necessary before they can learn the value of money.

On the other hand, we find the dictum, "A boy can only learn the value of money by spending it as he pleases." Perhaps the acquisition of such knowledge at so early an age is relatively unimportant, yet we all can sympathise with the aim of the minority, who in this, as other matters, endeavour to reduce restrictions upon their boys to a minimum.

6. *Limits of liberty allowed to boys in different parts of the school. Are they always under supervision?*

This question has elicited no information beyond that which has been given in Question 3. The figures, however, are slightly different.

67 Practically always.

44 No.

It may be added that several contributors protest against the word "supervision" as savouring of espionage. The masters are with the boys, but not as policemen.

In view of the almost unrestricted liberty allowed in some public schools, for which we prepare, do you allow any boys to take country walks alone?

31 Yes.

16 A privileged few.

62 No.

Two have given up the practice after finding that the right was abused. Two say that they give as much liberty as most public schools. One says that boys cannot learn to use liberty wisely, if they never have any. True,

but the personal factor is all-important. The best possible results are obtained by him who can afford to grant the widest liberty, the worst possible by him who grants it unwisely.

7. *Do you allow "Exeats"?*

(I have interpreted the word as meaning a break in the term, during which the boys may go away for two or more days, and have taken no account of special occasions when, for good or insufficient reasons, a boy may be called away by his parents.)

29 Yes.
81 No.

Do you think them necessary?

5 Yes.
109 No.

Of those who judge them necessary one assigns the reason "for cleaning class-rooms," while three imply that it is for the sake of "peace with parents."

Do you think them desirable?

9 Yes.
97 No

The following reasons are given for their desirability :--

"They are refreshing to masters and boys, and pleasing to parents."

"They give little boys something to look forward to: the idea of a long term without any break rather takes the heart out of them."

But there is no mistaking the attitude of headmasters in general; on other subjects they may make exceptions, they may qualify, they may even hesitate. On the subject of "exeats" they speak out a whole-hearted condemnation, sometimes with a bitterness that tells of a yoke that galls. "Most unnecessary and most undesirable," "they generally break up a boy's work when it is in full swing," "there is no more fruitful source of trouble, infection and other illness."

Have you any method of enforcing punctual return?

40 Yes.
33 No (some of them plaintively).
24 No need of such has been felt.

The methods adopted are: (i.) a printed notice sent to parents; (ii.) moral suasion, entreaty, and scolding addressed to parents; (iii.) punishment of the boy.

Two headmasters adopt methods more drastic. One fines the parent a guinea per diem during the boy's absence; the other writes: "I have had to request parents to remove their boys when there has been a collision between school views and parental authority. No school can be really efficient unless this course is adopted when necessary, and at whatever sacrifice."

8. *Do you impose any restrictions upon buying and selling among boys?*

4 Make no rules.
72 Forbid it.
44 Forbid it, but allow exceptions.

The exception most usually allowed is a bargain which has been approved as fair by the headmaster or other authority; but a few allow interchanges of foreign stamps, and two permit boys to sell the products of their own industry, e.g., photographs.

What rules have you as to borrowing and lending among boys?

4 Make no rules.
96 Forbid it.
12 Say that the working of their boys' banks renders it impossible.

9. *Are the school books the property of the boys or of the school?*

- 29 Of the school.
- 81 Of the boys.
- 8 Partly of each.

What about the destruction of books?

- 75 Replace them at culprit's expense.
- 7 Punish the offender.
- 5 Take a lenient view; "fair wear and tear demands a liberal margin."

10. *What kind of desks have you found best?*

The answers baffle classification. Single desks are oftenest mentioned as best, dual desks come next. Backs are desirable, also foot rests. Three contributors prefer the ordinary chair and table; one dislikes all patent desks; one says: "No boy ever sits at his desk in the correct position, however comfortable it may be."

The general impression conveyed is that the subject has not been very thoroughly considered; also that the various desiderata cannot be expected to enter into the same pattern. The ideal desk would be securely fixed yet easily movable; it would be fitted with ink-wells, but reversible; it would be roomy, but not exacting of space; it would be adjustable, but simple and silent. One contributor says: "I am still endeavouring to find a good one."

11. *Do your masters wear cap and gown?*

- 58 Yes.
- 58 No.

Sixteen of the former say that the use of these insignia is reserved for chapel or State functions.

Have you any rules as to their smoking among the boys?

- 30 Allow smoking without restriction.
- 17 " " except in class-rooms.
- 15 " " unless the master is "on duty."
- 50 It is prohibited, or "not done."

This is a subject upon which it is difficult to argue. It is not a question of right or wrong; the appeal is on the one side to common sense, on the other side to custom, prejudice, and good form, or perhaps to the indefinable feelings which have created and underlie these.

A good deal has been written in these papers on either side. Here is the appeal to common sense: "I smoke myself; the fathers of my boys smoke; I hope that my boys will all smoke when they become old enough; meanwhile they know that they will be flogged by me if they attempt it. All this is plain and above board. Concealment would only produce misunderstanding. If I might not smoke among my boys I would not smoke at all."

Forty-seven headmasters take some such view as this, only it is right to add that seventeen of them discourage smoking in the classrooms and the boys' part of the house. No reason for this distinction is given.

The appeal to custom comes somewhat in this shape: "In no profession is it customary for a man to smoke while he is officially engaged. We masters, whenever we are in the buildings or grounds of the school, are more or less officially engaged." Forty-three headmasters take this view.

An intermediate line is drawn: "I expect my masters not to smoke when 'on duty.' An officer does not smoke on parade, though he will smoke in the barrack-square when 'off duty.'" To this or some similar modification fifteen incline.

Lastly, there are seven headmasters who make no rules on the subject, yet record that, as a matter of fact, none of their masters smoke among the boys.

12. *Have your boys any special dress for summer or winter?*

58 No.

25 Introduce modifications in summer.

Thus, in eight schools grey flannel suits are worn in summer; in fifteen schools the boys wear their flannels all day long in hot weather. In one school they wear their flannels all through the year, merely adding under-clothing for cold weather.

What do you consider the ideal dress for young boys?

A Norfolk jacket (loose tweed is often specified), and knickerbockers is the dress which finds favour with most of the contributors. There are a very few supporters of the Eton dress (for Sundays this would, however, appear to be the usual dress), Rugby suits, French blouses, sailor suits, and even kilts. There is a preference for flannel shirts and Eton collars. One contributor emphasises the importance of white shady hats for summer. Several decline to offer an opinion; one is considering the possibility of inventing a suitable dress; one holds that "the ordinary mother is a good judge," an opinion with which many of us would probably be inclined to agree, whatever her shortcomings may be in the matter of "excoats" and of hampers.

Do you insist on their changing into flannel for their games?

There are only four schools in which this is not compulsory.

13. *Have you a School "Grub Shop"?*

18 Yes.

95 No.

(The "Grub Shop" must be understood as including sales by matron or other school official.)

Do you allow boys to go to such shops outside the school, and under what, if any, restrictions?

69 No.

2 Yes, without restrictions.

39 Yes, with restrictions.

The restrictions are:—

- i. Requiring each boy to obtain leave.
- ii. Appointing fixed hours, during which alone it is allowable.
- iii. Limiting the amount which may be spent.

In eight schools an authorised "man with a basket" attends on fixed occasions.

14. *Are hampers allowed?*

85 Yes.

35 No.

[The word "hamper" must be understood as meaning "delicacies supplied by parents."]

These figures do not fairly reflect the balance of headmasters' opinions regarding the desirability of hampers. Several discourage what they do not actually forbid, and several limit the contents of the hamper to fresh fruit, plain cakes, jam, and other delicacies suited only to the tea-table. In twenty-three schools the contents of hampers are distributed as common property; this arrangement obviates some of the more serious objections to hampers, but it will be understood that boy-opinion may press uncomfortably upon one who, owing to the strong views of an unconforming but otherwise sensible parent, fails to contribute to the common stock. One headmaster says: "They are a great nuisance, a source of bilious headaches and numerous other ailments," and the general impression conveyed by the answers is that headmasters feel that they are dealing with a foe that must be repressed, or, if irrepressible, must have its teeth drawn.

The one school, in which "hampers, though allowed, are never sent," is distinctly abnormal.

It is noteworthy that there are seventeen headmasters who are stalwart in the matter of "tuck" and refuse to admit it in any shape. Boys do not miss it, if they never see it ; they do not need it, if the requisite amount of sweets is provided in the school diet. Last, but not least, a rule of rigid repression is less provocative of grumbling and vastly easier to carry out (*experto credo*) than one which admits compromises.

Perhaps the following extract may seem fanciful, but I give it for what it is worth : "The boy's work, as shown by results, seems in inverse ratio to the amount of money he spends upon tuck."

What number of meals do you consider necessary?

		Full Meals.			Supplementary Meals.		
In	5 schools there are	-	3	-	-	-	0
"	19 " " "	-	3	-	-	-	1
"	64 " " "	-	3	-	-	-	2
"	13 " " "	-	3	-	-	-	3
"	10 " " "	-	4	-	-	-	0
"	4 " " "	-	4	-	-	-	1

Only two schools go beyond this.

A. J. C. DOWDING

ECONOMICS OF PREPARATORY SCHOOLS.

No one acquainted with the present state of Education in England will question that the bulk of the Preparatory School work has fallen into the hands of private individuals and become a matter of private enterprise. With the advantages and disadvantages of this system it is not the purpose of this paper to deal. The question certainly admits of serious discussion. Whatever opinion, however, should be finally held, there can be no doubt that anyone who is likely to succeed in this branch of educational work must face the question of finance courageously at the outset, and keep it constantly before his mind. A graduate, who gains a Public School Mastership with a desire to train himself as a teacher, is able to follow his bent to the utmost, with his literary instincts free from commercial fetters; and even when promotion lifts him to be a Housemaster or Head of a Grammar School, a few months experience will, in the majority of cases, enable him to master the financial routine which is incident to his new position. But with the Preparatory School Headmaster the question of finance is ever present, and he ought to realise from the first that he must give to it as much consideration as it receives from the successful man of business, though he must not expect the same gilded results. In the Preparatory School which is to command success in the present era of fierce competition the Head must be not only Teacher in school and Housemaster at other hours, but also an able Cashier, who can handle, distribute, and appraise at their true value the funds that are necessary to make his school as attractive and efficient as is possible. To realise the truth just stated, it will be well to consider how any teacher attains the position of Headmaster of a Preparatory School. He can either purchase the existing interest of some school; or he can set to work to create his own body of clients, this latter step being only possible if he can lock up some capital to maintain himself and his school till the clients are obtained. In each case some capital must be forthcoming, and our present point is to enquire how this capital can be said to be invested in such a way as to be remunerative. No one knows the value of his securities till he has tested them by quotation in the open market. Let us apply the same test to our Preparatory School capital. What bids are there for it? Plenty, surely, with such a large body of assistant masters eager to marry and start a school of their own. Numbers of these men are ready with capital up to a certain limit, but that limit is soon reached, as a Preparatory School is not such a sound basket that a careful man can afford to trust it with all his eggs. However, with such competition for our property, must not the basis of investment

be thoroughly sound as regards Preparatory School capital? Such a demand must surely force up the price of the capital in use, and the price quoted to us will be good. Let us rest, and be thankful that our wives and children will have gilt-edged securities, should we be taken from them. Alas! for a foolish dream, a baseless fabric, that will fall and crush, instead of sheltering us. Money invested in a sound school can sometimes be realised at a profit, owing to the competition for a *point d'appui*; but money locked up for starting a school is as pure a speculation as can be found in the commercial world, and to appreciate this, one must reflect that the larger the capital invested the greater the probability of the school being attractive to the parents of pupils who may or may not come. Of course a great *coup* may be made, but the theory of chances is a basis of investment more popular with the stock-jobber than the steady investor.

Let us now examine the causes which impair the chances of gaining on the average more than a moderate return from capital invested in a Preparatory School. The drain on the turnover of Preparatory Schools is very severe, and this drain is partly justifiable, partly the reverse. The public demand very rightly expensive training and high intelligence in the teachers; schoolrooms of good design, and well equipped with efficient apparatus; domestic buildings of suitable construction, and well furnished with all the requirements of modern society. These needs are often costly, but are exacted with justice from those who profess to train the children of the upper classes. On the other hand, there is an unquestionable desire on the part of many parents to secure for their boys an amount of personal comfort and even luxury quite at variance with the standard of living which rightly prevails at the Public Schools, for which they are being prepared; and this tendency naturally leads on to a habit of allowing the choice of a school to be determined by minor details which are simply showy and superficial, ignoring the question of how the main requisites are likely to be supplied. The result of this must be that the Headmaster, who wishes to avoid suffering from competition, must indulge in expenditure which he considers quite unnecessary; for the health and comfort of his boys would be amply secured without it. And while he is called upon to pay more largely with one hand, he is often debarred from receiving what he considers his due with the other; for one result of fierce competition must always be that there are constant requests for a lower scale of fees, which only the very successful schoolmasters are able to resist; and it is best in any statement to deal with the average, and not the extreme at either end. The heart would require more than "*æs triplex*" to be proof against a fair entreaty backed with a promise of several boys; but again the profits suffer. Are we not also living in times, when the unreasonable wishes of parents for the exceptional treatment of their sons have often to be gratified at great expense by the foster-parent? With all these possible items to set on the debit side, what percentage of profit may the

Preparatory Schoolmaster expect on the average from his capital? It is more difficult than an outsider would imagine to state the average amount of this percentage. It is often assumed that for so many boys there is so much profit, and that the rate of profit is greater as numbers increase; but this is one of those dangerous half-truths which none but those who place themselves absolutely in the hands of an educational agent would venture to accept. The truth is that with most Preparatory Schools the profit is very uncertain, and the profit and loss account has to be carefully balanced before one can be certain of it. There are undoubtedly old established schools, the connexion of which is so wide, and well assured, that they are not called upon to incur the expenditure which is imperative in others. In the majority of cases, however, the public demand for changes in the style and equipment of schools varies so rapidly, according to the fleeting fashion of the hour, that the capital locked up at the start seems to need ever fresh accretions in the way of money laid out in improvements that are necessary, if the school is to remain attractive. As an instance of this constant drain the accounts of a large Preparatory School of over 100 boys show that during the last seven years there has been a turnover of £85,000, and yet a mortgage of £8,000 on the school still remains, in spite of the personal expenditure of the Headmaster being even less than moderate. In this case £45,000 is put down as the minimum cost of improvements. Another school with a turnover of £77,000 for the same period is debited with a capital expenditure of £30,000. In both these cases careful accounts have been kept. Another master of a successful day school speaks of a capital of £5,000 as having been needed to launch his school; while during twenty years he has spent quite £2,000 more in improvements. One hardly wonders that with such a laudable desire to keep his school efficient, he has not been able to pay off more than half the mortgage effected at the outset.

While there is this growing need for making these additions to capital, while salaries mount up, wages increase, and rates multiply indefinitely, the average of fees obtained by Preparatory Schools is far less than it was ten years ago. It would not be far wrong to say that in those ten years profits have diminished by 25 per cent. It is fortunate for the British public who desire a good supply of Secondary Education in its elementary stage that so much capital has been devoted from private sources towards furnishing this supply; for it cannot be questioned that they have obtained a splendidly equipped system.

Let us now examine in detail the various forms of expenditure entailed by this system.

When a young graduate leaves the University a mastership at a good Preparatory School offers him a very well paid post; his salary generally begins at £100 with board and lodging, and men who throw themselves into the work and make themselves useful and efficient can rapidly

double their salary: there was an instance lately of a good mathematician being offered a resident mastership of £300 a year to start with. This paper is not concerned with the vexed question of the ultimate prospects of assistant masters, but the average income of a large body of resident masters, visiting teachers, drill sergeants, etc., can be easily seen to be a serious item in the preparatory schoolmaster's balance sheet. Besides, is the time, attention, personal supervision, and organising power demanded from the Head to be assessed at nil? An income of at least £500 is not an exorbitant sum to reward such constant attention, and if this is below the average income of Preparatory School Headmasters, which I fear is the case, there is in this sphere of Education a large amount of underpaid labour presented annually to the public.

No schoolroom is now regarded as properly furnished unless equipped with modern types of desks and seats, well-drawn maps and diagrams, and shelves lined with the books of a good school library. This expenditure alone easily rises beyond £100 for a school of any size. Again, every schoolmaster is tempted to add to the comfort or convenience of his school by enlarging his buildings. In fact, building operations are a very maelstrom in their absorption of savings. Let the instance already recorded of £45,000 be recalled, while a leading school in the North of England is said to have cost nearer £50,000; and, to descend to a lower level, a school for thirty boys had quite a plain dormitory and schoolroom added to it at a cost of £1,500.

Buildings both absorb money and demand brains for their arrangements, and both have been lavishly given to Preparatory Schools. The training of the boys' bodies is now rightly insisted on, and requires the provision of gymnasia, baths, and playing-rooms. No one can hope to build a proper-sized gymnasium, even of wood, and fit it with apparatus, under an expenditure of at least £200, and for large numbers that sum may easily be trebled. The cost of a bath depends largely on the site and its power of adaptation: but £150 is a minimum estimate for one of adequate size, and if it is covered in and heated, more than double that sum will be needed. The cost of playing-rooms and cricket fields varies indefinitely according to position and locality, but there are several schools which have to pay as much as £50 for the use of a suitable field. Beyond all these there is the cost of museums, libraries, and workshops. In the face of these details all necessary to complete efficiency, who would deny that a Preparatory School is a venture that calls for the expenditure of considerable capital? And yet that capital furnishes but a moderate certainty of adequate financial return.

The Preparatory Schoolmaster is embarked on the most capricious of all trades; though, as regards brain and character, his work may be of the noblest. The best efforts of the most capable headmaster may fail absolutely through no fault of his; for there are ever hovering round him, like bad dreams, a flock of phantom elements of failure. A health certificate is

now rigorously exacted by every headmaster from boys on their return after holidays; but, while such a step may cultivate greater care on the part of those who have to sign the certificate it cannot guarantee immunity from illness, which may be introduced at any time latent in the system of some boy. A detached sanatorium—another costly building item—is generally the appendage of a Preparatory School, and though the isolation which it provides is a great safeguard against the rapid spread of any epidemic, its effective arrest of contagion is dependent on a good deal of luck in detecting the first signs of sickening before the patient becomes infectious. The long list of complaints enumerated on our certificates is ever present to warn us that, take whatever precautions we may, we are very near a danger that may imperil our welfare. Nor is the area of danger confined to our own school; for we have of late years seen disastrous effects resulting in certain towns on the South Coast from the outbreak of epidemics, which created a panic in the minds of parents. It would not be difficult to summon witnesses who would tell the story of their schools being virtually ruined by this very panic. A terrible phantom is the apathy of local sanitary authorities.

Again, the connexion of a Preparatory School often depends so much on the personality of the headmaster that, if it is broken by his sudden death, before continuity is established with a successor, its value is sadly impaired as a realisable asset: for, though sickness or death may impair the value of any business, the effect is trebled where the dominant factor of success is personality. Further, there may be often letters that vex the heart of a Preparatory Head, but none are so trying as those that bring to his notice some lâches or unjust conduct on the part of his assistant masters. He feels that nothing can divest him of responsibility for any wrong that has been inflicted or any irregularity that has caused dissatisfaction; but at the same time he knows that what has occurred has been done in direct contravention of his clear instructions, and that his experience of the offender has never led him to expect this disloyalty from him. Well ordered Preparatory Schools resemble happy households of young people so much more than corporate bodies, that the acts of individual members raise or lower the reputation of the school more rapidly than is the case with larger schools. Lastly, the popular breeze must fill the sails of the Preparatory School bark, if it is to make good weather; and what a fickle wind it may often prove!

Surely it must be something more than a desire of profit that makes level-headed men sink their money in buildings founded on such quicksands. Preparatory Schools, save for a very few, are no Eldorado or Klondyke, but a very hardly worked soil which needs constant cultivation, and the crops of which are often snatched away by influences as fickle as British weather. The need, which has been already emphasised, of keeping abreast of the times, entails such a constant drain of resource and money, that the percentage realised can never be high. Many successful

men have calculated that 4 per cent. is the outside interest they are reaping on all the capital that has been sunk ; and the man would be sanguine who could ever hope to realise at par the capital invested. Yet England surely may take it as a good sign for the future training of her young citizens that she can find so many men of high character who are so fired with educational zeal as to be willing to risk their money on a thoroughly insecure financial basis.

C. BLACK.

PREPARATION FOR THE PREPARATORY SCHOOL.

It is not proposed in the limits of a short article to cover the wide field of the moral, mental, and physical education of young children, but rather, with a view to the much-desired continuity of education, to show how the mental training of the child destined to go to a Preparatory School may be best harmonised with the existing conditions of those schools. It is not intended, however, and it is necessary to say this at the outset, to set up the mental training of the Preparatory Schools as an ideal education for the young boy. In the opinion of many competent judges it is too exclusively linguistic and mathematical, and takes little account of other important sides of education. Into the reasons for this it is unnecessary to enter here; it is enough to say that any wise system of home education will aim at supplying these deficiencies to some extent.

It will be best to fix the limit of home training at nine years, and this for many reasons. On the one hand, few boys are sufficiently independent in their habits to leave home before this age, nor is it desirable that they should be removed earlier from the immediate influence of the mother; on the other, it is highly important that a boy's education should be broken by as few changes as possible, and that the second stage, from nine to fourteen, should be at one school and under one system of teaching. Now the forms of a Preparatory School are invariably graduated on a Latin standard, and the course of teaching is made continuous from beginning to end. In many schools it is found advisable to have a beginners' class for boys who have been insufficiently prepared in elementary subjects; but the well-prepared boy of nine can take his place in the lowest Latin form to begin the language then, and with five years before him can, if he be of average ability, secure sufficient time in the highest form to ensure a good position in any Public School Entrance Examination, or, if he be a clever boy, to win an Entrance Scholarship.

It rarely happens that an older boy is able to qualify for a higher form, and if he does, he labours under the disadvantages of a change of teachers and probably a change of text-book and system. It has been shown by recent statistics that the actual age of entry is on an average rather over nine and a half. Boys enter from eight to eleven, roughly speaking; that is, some exceptionally independent or less amenable to petticoat-government come earlier, others come later, either because they have been kept at home for reasons of health, or because parents prefer a preliminary

breaking in at a day school or at one of the pretty numerous boarding schools for little boys which are conducted by ladies. There are not a few excellent Preparatory Schools which receive day boys, and where such a school is available nothing can be better than this combination of home training with the wholesome influence of corporate school life—a system, moreover, by which continuous education may be secured from a very early age till the boy goes to his Public School; but these advantages are not to be had in country districts, while in great towns such schools are often hampered by the difficulty of securing open spaces for playgrounds and providing for the organised school games which are so important a factor in a boy's education.

The question then for our consideration is this, "How may a young boy be best educated up to the age of nine for his school career?" The first and last essential is that he should be interested in what he learns, and should be put in the way of acquiring good mental habits and good methods of work. What he has learnt is of no importance whatever, compared with how he has learnt it. The interest that a boy takes in his work is very little affected by the nature of the task before him, but is always in exact proportion to the power of achievement which is awakened within him by clear, judicious and stimulating teaching. He must be taught from the first to aim at a high standard of thoroughness and accuracy and a habit of concentrating his attention on the work in hand. Nothing is more useful to a boy, when he goes to school and takes his place in a class of eight or ten boys, than the power of thoroughly mastering a given piece of work in a given time. Every lesson should therefore be short and should be required to be known perfectly within a reasonable time. If the child cannot do it, shorten the lesson rather than extend the time. It must be confessed that these general principles, sufficiently obvious to an experienced teacher, are too often neglected in home training. The position of a governess in a private family is one of much difficulty and claims our fullest sympathy. Unless the heads of the family are persons of exceptional knowledge and discrimination in educational matters, the temptation may be overpowering to push on as fast as possible and show by 'results' that the pupil is getting on, that is, is doing more advanced work. From this springs a whole crop of evils, especially in the case of the less quick-witted children, difficulties are skimmed over, the teacher following the line of least resistance; to save friction injudicious help is given, the boy learns no standard of thoroughness or accuracy, and loses interest, because he loses (or has never gained) that sense of power which enlivens the duller subject and is the mainspring of mental progress. To the Preparatory School is left the heaviest of all heavy tasks—the unteaching of bad methods and bad mental habits. I am putting an extreme case to illustrate a tendency and a danger. I am far from suggesting that this is confined to home teaching or to lady teachers. The same tendency may be observed in University men who are learning their work in Preparatory Schools, but it is more quickly corrected in the organised system of

a school where the teacher profits by the experience of his colleagues and the frequent examination and criticism of his work. The true remedy is only to be found in the frank recognition of the fact that the teaching of the young is a difficult art, demanding patient study as well as natural gifts, on which no one should be permitted to embark without careful preliminary training. This truth is far from being generally accepted by the headmasters of either Public or Preparatory Schools, who share between them the responsibility for the education of young boys. In the sphere of home education much good work has been done in this direction by the Parents' National Educational Union, which at its House of Education at Ambleside is turning out a supply of well-trained governesses; and it is only fair to admit that women teachers have hitherto shown a far greater appreciation than men of the value of training, and far greater readiness to avail themselves of opportunities of obtaining it.

It remains to be said that besides having learnt good methods and habits of work, but little equipment in actual knowledge is necessary for a boy entering a Preparatory School at nine years of age. It is necessary that he should have learned to read fluently, to spell easy words correctly, and to write with fair ease. Until these difficulties are surmounted, progress in other subjects can only be very slow. In arithmetic it is well that he should have acquired *real facility* in the working of the four simple rules both orally and on paper; experience shows that the boys who have once gained this facility have little trouble with more advanced work. In view of the fact that these boys are to get their main grammatical training from Latin (and perhaps Greek) it is not necessary or desirable to attempt more English Grammar than the elementary principles which serve as an introduction to the study of all languages, and which are most easily learnt in English. These principles will be (1), the meanings of the parts of speech and the parsing of English words; (2), the construction and analysis of the simple sentence. With this foundation a boy may, if he have time and opportunity, begin Latin, and it will be to his advantage to have learned by heart the conjugation of the Regular Verbs and the declension of Substantives and Adjectives. Unless skilled teaching is available it would be better not to proceed further than this. The time for beginning French will depend much on opportunity. The young boy will hardly be able to give much time to both French and Latin in addition to other necessary subjects. He should, therefore, give more time to French or to Latin, according as in the one or in the other the better teaching may be available. In teaching French, pronunciation should be carefully studied from the outset—the pupil must have regular drill in the commoner of those sounds which do not come naturally to an English mouth. Very easy reading, learning very easy poetry by heart, and, if possible, conversation, are more useful to the beginner than grammar rules. The French learnt from French nurses is not, as a rule, worth much. The teacher must be an educated person with a good knowledge of both English and French.

Considering the predominant part that is played by memory during these early years, great care should be taken to insist on the intelligent use of it. No lesson should be given to be learnt by heart until it has been thoroughly explained and understood. Among the best exercises are the learning of easy English poetry and the oral (or written) reproduction of a story that has been told on the preceding day.

It will be seen that the actual amount of knowledge required for a boy entering a Preparatory School at nine years old is not large, and that his fitness will depend rather on careful training in good methods. Nothing has been said so far, of the training of hand and eye, but this is a most essential part of early education, and the more so, for the very reason that it is lamentably neglected in Public and Preparatory Schools. It must not be forgotten that the curriculum of the Preparatory Schools cannot claim to be ideal. It is imposed upon them from above by the Public Schools and is dominated and vitiated by the system of Public School Entrance Scholarships, which are still given, not to the best educated boys (taking education to mean the harmonious development of all the faculties), but to those who at the age of fourteen reach the highest standard in the Classical Languages and Mathematics. This tends to undue specialisation in the subjects thus rewarded, and consequently to the elimination of others hardly less important. Among these is drawing, which, if it finds a place at all in the Preparatory School, is seldom represented by more than one hour a week. The importance of manual training is fully recognised by the Parents' National Educational Union, and generally by such schools for young children as understand and follow Froebel's principles. There are many spurious Kindergartens, but the writer has found nowhere better material to work upon than the product of the true Kindergarten which is distinguished by its careful attention to the formation of character and habit, the harmonious development of all faculties, and the power of awakening interest and intelligence.

The time-tables of two schools are appended, both of which the writer has reason to know have been eminently successful in the work they profess to do. School A is a Kindergarten, pure and simple, differing from the German model only in beginning to teach reading at an earlier stage. School B is on much the same lines, but carries on the work with an upper form to the age of eleven. As we have taken nine as our age limit, only the two lower forms are given here.

E. D. MANSFIELD.

SCHOOL A (KINDERGARTEN).—Four to Seven Years (Boys and Girls), 12 hrs. 30 mins. per week.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9.30	Hymn and Prayer -	Hymn and Prayer -	Hymn and Prayer -	Hymn and Prayer -	Hymn and Prayer.
9.40	Scripture Stories -	Scripture Stories -	Scripture Stories -	Scripture Stories -	Scripture Stories.
9.55	{ Set A, Reading Sets B & C, Building }	Drill - - -	Drill - - -	{ Set A, Sewing Sets B & C, Reading }	K.G. Games.
10.15	{ Sets A & B, Writing Set C, Drawing }	Set A, Drawing Sets B & C, Reading	Sets A & B, Arithmetic Set C, Bricks	Set A, Reading Sets B & C, Sewing	Set A, Arithmetic. Sets B & C, Writing.
10.45	Recreation in Garden.	Recreation in Garden	Recreation in Garden	Recreation in Garden	Recreation in Garden.
11.15	{ Set A, Sewing Sets B & C, Reading }	Writing - - -	Writing - - -	{ Set A, Dictation Sets B & C, Writing }	Set A, Reading. Sets B & C, Bricks.
11.30	K.G. Games and Songs -	{ Set A, Reading Sets B & C, Bricks }	Sand (for Geography)	K.G. Games - - -	Plaiting.
11.45	Tables - - -	Arithmetic - - -	K.G. Games - - -	Object Lesson - - -	{ Set A, Writing. Sets B & C, Reading.
12.	Fairy Tales for vv. repro- duction	Paper Folding, Cutting and Pasting	History - - -	Drawing, Object or Modelling	Balls.
12.15	Class Singing - - -	"	Reading - - -	Class Singing - - -	Sticklaying.
ANALYSIS.—					
	Mental Work - - -	Set A. 7 h. 40 m.	Set B. 7 h. 25 m.	Set C. 6 h. 25 m.	
	Manual and Physical - - -	4 " 50 "	5 " 5 "	6 " 5 "	
	Total - - -	12 " 30 "	12 " 30 "	12 " 30 "	

SCHOOL B (UPPER DIVISION).—Six to Nine Years (Boys and Girls), 17 hrs. 45 min. per week.

—	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9.30	Scripture -	Prepare (Spelling - French -	Coins -	History -	Description of Brush Pictures -	Painting.
10	Geography -	Story -	Writing -	Brush Pictures -	Criticise Brush Pictures -	Painting.
10.20	Drill -	Drill -	10.15 Mental Arithmetic -	Drill -	Drill -	10.30. Drill.
10.35	French -	Number -	Memory Drawing -	French -	Poetry -	10.45. Geography.
10.50	Recreation -	Recreation -	Recreation -	Recreation -	Recreation -	11.20. Recreation.
11	Composition -	Nature Lesson -	Gymnastics -	Tonic Sol-fa -	French -	11.30. Games.
11.40	Correct Composition	Games -	" -	Arithmetic -	Reading & Dictation	12. Reading & Dictation
12.5-12.30	Number -	Modelling -	" -	Brush Pictures -	Gardening -	—

Gardening on Thursday afternoon, 2.45-3.30.

ANALYSIS.—Mental Work. - - - 8 hrs. 45 min.
Manual and Physical - - - 9 " 0 "

Total - - - 17 " 45 "

N.B.—Some subjects are not easily classified. Vocal Music and Memory Drawing are here reckoned as Physical and Manual Exercises.

SCHOOL B (LOWER DIVISION).—Five Years (Boys and Girls), 9 hrs. 10 min. per week.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9.30	Scripture . . .	Number . . .	Reading . . .	{ Number, and Mat- plating . . .	Measuring.	No work.
10	Number . . .	Story . . .	Paper Cutting . . .	Geography . . .	Reading.	
10.20	Drill . . .	Drill . . .	10.15 Brush Pictures . . .	Drill . . .	Drill.	
10.35	Drawing . . .	French . . .	10.30 French . . .	{ Correct Brush Pictures	Drawing.	
12.50	Recreation . . .	Recreation . . .	Recreation . . .	Recreation . . .	Recreation.	
11-11.30	Modelling . . .	Natural History . . .	Flower Painting . . .	Writing and Drawing . . .	French.	

ANALYSIS.—Mental Work	4 hrs. 40 min.
Manual and Physical	4 " 30 "
Total	9 " 10 "

PREPARATORY BOYS' SCHOOLS UNDER LADY PRINCIPALS.

THE compiling of this paper has been attended with considerable disappointment. From several districts in which inquiries were instituted for the names and addresses of ladies keeping boys' schools came back the answer: "There used to be several such schools here, but they have now ceased to exist, or have been handed over to men." Nevertheless, 114 names and addresses were obtained, and questions bearing on the details of school management were sent round to all of these.

Two or three of those who replied had schools of a different type. Two or three sent word that their schools had existed but were now given up. And in the end only 24 sets of answers were received to the questions submitted, or to some of them, from schools of the kind specified.

Of these 24 schools the oldest has been established 62 years, the youngest two; their average age is a fraction under 20 years.

They contain an aggregate of 597 boys, which gives an average of nearly 25 apiece.

Of the 24, six receive boys at four years of age, eight at five years, seven at six years, and three at seven years or over.

They keep boys—one till 10 years of age, three till 11, six till 12, three till 13, nine till 14, and two till 15.

Of the 24, one invariably, two rarely, three generally, and the rest sometimes send on boys direct to one or other of the Public Schools. In other words, there is only one out of the 24 which never sends a boy first to some other Preparatory School kept by a master.

Six of these schools take girls as well as boys, with an average of 13 girls apiece in addition to the boys.

For the 597 boys, 67 girls, and 21 children in one school whose sex is not specified, there are 18 regular masters, and, reckoning the 24 heads, 81 regular lady teachers, which gives an average of one master for every 38, one mistress for every 8½, or more than one regular teacher for every seven children.

Besides the regular staffs there are in all 43 visiting masters and 24 visiting mistresses for music, singing, dancing, drill, and so forth.

The chief authority—educational, moral and disciplinary—is

in 21 cases kept entirely in the hands of the lady principal. One keeps it chiefly in her own hands, one delegates the "educational authority" to her senior master, retaining the rest in her own hands; one makes an exception as to games which she leaves altogether to the "games' master."

All 24, with perhaps one exception, make provision for games. Five record the fact that they have a field (many of the others, no doubt, have a field also), nine speak of a "games' master" or "a master with a special aptitude for games," or at least a master who plays games with the boys. Two mention a cricket professional, one in addition to cricket and football mentions boxing as a regular institution, one swimming, one "hare and hounds," one "field sports," which is somewhat ambiguous. One energetic head mistress herself goes out regularly into the football field as referee.

Of 20 ladies who replied to the queries having special reference to health and physical training, four have each a detached sanatorium, which has existed for 6, 12, 13, and 16 years respectively. Two state that they have so few boarders that a private sanatorium is unnecessary. Most rely apparently on the expedient of taking lodgings in case of any outbreak of infectious illness. One happy school of 20 boys has had "no illness of any kind since the school began nine years ago." At 13 of these 20 schools boys are always under supervision; at 7 they are allowed some leisure time to employ as they please.

There is nothing special to notice in the meal times. They seem to be very much the same at all the schools. Every one breakfasts at from 8.0 to 8.30, and dines at from 1.0 to 1.30. Tea time is more variable, ranging from 5.0 to 6.30.

Biscuits or light luncheon of some kind is generally provided at 11.0; and those who have tea early give the boys something before sending them to bed.

As regards the length of lessons, most of the ladies seem to have adopted three-quarters of an hour as the normal period; some 40 minutes, and some few, in certain cases, only half an hour. But very few still adhere to the old-fashioned length of a full hour.

Questions were also asked as to the curriculum, and lady principals were invited to fill up schemes of all their working hours, showing the length of time allotted in the week to each subject in the various classes. So many of the schemes were incompletely filled up that it is difficult to formulate the results satisfactorily. But the accompanying table of the average weekly period given to each subject in each class will, it is hoped, give some idea of the work being done. In considering this table it must be noted (i.) that class I. is always the lowest; (ii.) that all the schools naturally do not contain the same number of classes, *e.g.*, Class VII. exists in one school only of those who filled up schemes; (iii.) that the number of schools of which the average is taken varies with almost every subject.

Preparatory Boys' Schools under Lady Principals. 429

Number of Class.	1.	2.	3.	4.	5.	6.	7.	Number of Schools which gave a Return in this particular.
Religious knowledge	1'33	1'33	1'29	1'25	1'12	1'15	'52	18 Schools.
English Language and Literature, including Grammar and Composition.)	* 3'5	2'31	1'38	1'30	1'25	1'0	'30	15 "
	* Reading only.							
French	2'6	2'5	2'9	2'8	2'26	2'20	2'0	14 "
Latin	2'20	2'46	2'31	3'19	3'44	3'58	4'40	14 "
Greek	—	—	2'15	2'15	2'50	3'40	3'40	2 "
German	—	—	1'30	1'5	2'25	3'40	3'40	2 "
English History	1'20	1'20	1'16	1'15	1'17	1'12	'40	16 "
Roman History	—	—	—	—	'30	'30	—	1 "
Geography	1'11	1'19	1'24	1'27	1'21	1'3	'40	16 "
Arithmetic	3'24	3'24	3'0	3'6	3'15	3'15	3'45	16 "
Algebra	—	1'36	1'39	1'24	1'36	1'30	2'40	5 "
Geometry	—	1'30	1'0	'57	1'10	1'28	2'40	7 "
Writing and Dictation	3'10	3'0	2'4	1'50	1'36	1'5	30	17 "
Object Lessons and Elementary Science.	1'7	4'7	'51	'41	'32	'45	—	9 "
Drawing	1'35	1'22	1'24	1'25	1'15	1'22	—	15 "

N.B.—(1) These figures are intended to be read as in a railway time table, e.g., 4'40 denotes 4 hours 40 minutes.

(2) The number in the 8th column shows the number of schools which made a return for that particular subject, the averages of each class were taken separately.

Latin is begun at five of these schools at the age of about eight; at one school at seven years; at two at nine; but in most cases the age given is qualified by some such phrase as: "When they can read with fair fluency and write." One lady begins: "Quite young—verbally."

At nine schools French is begun before Latin. Four of the nine principals think that they get better results by beginning with French; two do not think so; only one expresses the opinion that Latin is the better language on which to base the training of the intelligence.

In answer to the question: "Do you teach French *in French*, as far as possible, from the beginning and throughout?" thirteen answer "Yes," but the answers are all more or less qualified; two more are ambiguous, while one finds "that the Gouin method is not sufficient for Public Schools."

Of these same schools nine only teach Greek, beginning mostly at 11 years of age, or "when he can do Latin translation fairly well."

Seventeen teach drawing as part of the regular school course, six carpentering, eleven singing, ten science of some kind. One lady teaches electricity, zoology, chemistry, and physics; one some elements of human physiology.

Six confess without comment to specialising. Two specialise "if desired" or "if required."

With a view to discovering whether lady principals are in advance of men in what is now, or ought to be, the most important question agitating the educational world—the training of teachers—the following questions were asked:—"Have you formed any opinion as to the most valuable kind of training for the work of teaching in a Preparatory School? Would you have it include a theoretical as well as a practical side? If so, in what subjects?"

These questions were left unanswered by 10 out of the 24. The answers of the remaining 14 are somewhat vague. One lady only replies affirmatively and completely to both questions. She would have teachers trained in anatomy, hygiene, psychology; and have them study the lives of Froebel, Pestalozzi, Arnold, and Thring. Four more seem to be in favour of training of some kind, but one of these believes that "theories are not much use"; while two avoid reference to that part of the question. There were two emphatic "No's," and, indeed, the majority, though most of the answers are couched in somewhat ambiguous language, appear to share the opinion still held by many of their brothers in teaching that:—Practical experience is all that is wanted, and that previous training is unnecessary. Two take their stand on the old half-truth that teachers are born, not made, and a few even seem convinced that theory is incompatible with good practical work. One lady has been obliged to give up altogether engaging resident masters, because she has "had three one after another who were all theory."

These statistics are less valuable than they might have been, because they are compiled from so few schools; and there is, moreover, reason to fear that from some of the best and most efficient ladies' schools no returns at all were made.

The remarks which follow are based partly on the perusal of the papers from which the foregoing particulars were derived, partly on conversations on the subject held with other school-masters, partly on individual observations extending over a period of more than 20 years.

It is well known that valuable and interesting work is now being done by lady teachers in classes for little boys and girls, but so far as preparatory schools (in the strictest sense of the term and as distinguished from pre-preparatory classes) are concerned, it would appear that boys' preparatory schools kept by ladies are not, in proportion to other preparatory schools of the same type, so numerous as they were a generation ago. It should be added that in the absence of complete statistics no confident opinion can be expressed on the subject. Nor can any one say whether the present tendency is more than a temporary one. To some extent indeed the change may be apparent rather than real. Probably more women than ever are now engaged in preparatory school work, though not so often in the capacity of principals as of assistants on the staff. But in so far as there has been a relative decline in the number of boys'

preparatory schools kept by ladies, the reasons appear to be as follows:—

- (i.) The deliberate choice of the ladies themselves.
- (ii.) The choice of the parents.
- (iii.) The influence of schoolmasters.

(i.) The large increase within the last 25 years in the number of girls' schools, and the heightened standard of learning in such schools, have been attracting more and more women with a bent for teaching. The "girls' high schoolmistress" is an entirely new product, and a welcome one, of the last quarter of this century.

Most of the more highly educated women who have taken to teaching as a profession in recent years have preferred to devote themselves to work in schools for children of their own sex. At the same time it should be observed that many girls' schools have a kindergarten department in which little boys and girls are taught together. Nor should it be forgotten that the financial risks incurred by the principal of a boys' preparatory school under modern conditions is serious and often harassing, and not always within the means of women engaged in the teaching profession.

(ii.) There seems to be a growing dislike on the part of many parents to send their small boys to *schools* kept by ladies. Many preparatory schoolmasters who began with a hard-and-fast rule to "take no boy till he can read and write," or "no boy under eight," have been driven to modify their plan and open a class for quite small children, because parents say plainly: "We want our boy to come to you, but we will not send him first to any school kept by a lady." What is the reason for this attitude of the parents? And how far can it be justified? It is partly owing to the fact that men, as preparatory schoolmasters, seem lately to have developed certain qualities which were once supposed to be the especial attribute of women; that is, a gentleness of manner in dealing with boys, a watchfulness, a carefulness of health even to fussiness, which were quite unknown in most, if not in all, schoolmasters of the last and previous generations. It was then supposed that a woman was the more proper person to have charge of delicate or especially sensitive boys, or of very young boys. At a man's school it was taken for granted things went more roughly, and a boy must take his chance. But now, when more boys than not are said to be delicate and especially sensitive, preparatory schoolmasters have risen to the occasion, and most Preparatory Schools are very Temples of Carefulness, and some perhaps even of Luxury. Whether this new departure is good for the race as a whole, whether even it is an unmixed blessing for the delicate and especially sensitive unit, is an open question.

(iii.) Apart from the preference, which has always existed, other things being equal, for sending boys to a school kept and

taught by a man, those parents who have preferred to discard the help of ladies' schools have often done so by reason of the influence and advice of schoolmasters, many of whom openly and freely express disapproval of boys' schools kept by ladies.

The present writer is far from giving an unqualified assent to such expressions of disapproval. At the same time he is by no means of opinion that the disapproval so often expressed is due to jealousy or trade-union selfishness. He therefore proceeds to state the criticisms as he has heard them stated, but no one acquainted with the subject will regard them as universally applicable. They are generally applied, not to those ladies' schools (comparatively few in number) which send boys straight to the public schools, but to the general run of small schools from which boys pass on, at the age of 9, 10 or 11, to preparatory schools kept by men. But some classes or little schools of this type, so far from being open to criticism on the score of inefficiency, are admirably conducted alike in regard to the organisation of their work and to the educational results achieved.

Against the unsatisfactory ones, however, the following criticisms are brought :—

(a) That they fail in discipline; sometimes from the motherly instinct which prompts women to spoil children; more often through worrying the boys by excessive attention to vexatious details.

(b) That they fail in teaching; not at all from neglect or want of effort, but because they attempt to teach too much, or to teach things in the wrong order. For example, to teach a boy not only the Latin declensions before he can tell a noun from an adjective, the Latin verbs before he can tell a pronoun from a verb, but both before he can read simple English; to take him on in Arithmetic to Compound Addition, Vulgar Fractions, or even Practice, before he can do Simple Multiplication and Division; with the result (it is alleged) that boys do too frequently come on from a lady's to a man's school at the age of nine, or older, not only unable to decline a noun or conjugate a tense of any regular Latin verb—over which much time and labour have been wasted—but unable to say the English personal pronouns in the conventional order; unable to go through the simple auxiliary tenses "I am" and "I have"; unable sometimes to read correctly, to write legibly, or even to articulate distinctly.

(c) That they fail in moral training; because (as it is said) a woman is not so well able as a man to follow the workings of a boy's mind. And further—a more serious point—by reason of her sex a woman is often absolutely ignorant of the particular moral dangers which attend the physical development of almost all boys.

In the opinion of the present writer, these charges, so far from

being universally applicable, should be examined with the utmost discrimination. The training of little boys, especially under 10 years of age, is work in which skilled and sympathetic women teachers are specially fitted to excel. The admirable work now being done in some of these pre-preparatory school classes is well known to those who are acquainted with the subject. There is indeed some reason to hope that much good may come from the educational experiments which are being made in some of these classes. But at the same time it will be generally agreed that the work done in very many of these little schools kept by ladies calls for improvement. The right conclusion would seem to be that better methods of teaching must be supplied to, and required from, all those (of either sex) who teach "the beggarly elements," it being understood, of course, that a large number of teachers already have good methods, and use them. For, if our whole system of education is to be maintained at or above a definite level of excellence, it ought to be made impossible for such wholesale accusations to be brought, even unjustly, against any body of teachers in the future; a result which may be attained in one of two ways—either by a compulsory registration of teachers, who shall not be registered unless they can show that they possess real qualifications to teach; or voluntarily, by a wider dissemination by teachers among themselves of a knowledge concerning what things had best be taught to children, and how best to teach them. The voluntary method would undoubtedly be most generally acceptable, and probably in the end, if it could be started, the most successful, being most in accordance with the free traditions of the English race. But it presupposes a greater intimacy, or association for the exchange of ideas, between preparatory schoolmasters and boys' schoolmistresses—an association which, there is reason to believe, the ladies would for the most part welcome. Such voluntary association would not prevent—it would probably further—the establishment of more training schools for teachers, a step which must inevitably follow as the only reasonable corollary of a compulsory register. Nor would the ladies only be the gainers by such an association of teachers of both sexes. Each sex has much to learn from the other. Moreover, it must not by any means be supposed that it is only the teachers in ladies' schools who need more insight into better methods. It is probable—nay, it is certain—that if the initial training of all those boys, who come comparative failures from ladies' schools to men's, had been in the hands of so many men instead of women—other things being equal—the failures would have been as many and as great, perhaps more so. If (and this also may be questioned) there are at present more failures among women teachers of boys than among men, it is not because they are women, but because they occupy themselves in greater numbers with the most difficult part of teaching—the very beginnings. It is not a new discovery that the elements are harder to teach than anything else; but, like that of the sources of the Nile, it is a discovery that has lain forgotten until quite recently for many years. Women are

undoubtedly better adapted than men to teach young children of either sex by reason of their wider sympathy, their natural gentleness, and above all their greater patience. How few men could, if they would, teach children to read? At those preparatory schools worked by men, where very young boys are taken as pupils, there is invariably a governess to teach the lowest class for at least a part of every day.

Ladies' schools have done good and helpful work in the past, and will, it is to be hoped, do better work still in the future, by taking boys as young as they and the parents choose, keeping and teaching them till they are ten years old or thereabouts, and then passing them on to a larger Preparatory School under a man. Though, if they choose to keep boys till they are 14, there is no reason, that is, no reasonable reason, why they should not do so; of which more presently.

But inasmuch as to some of these pre-preparatory schoolmistresses the Latin to be eventually required of their pupils looms from the beginning an uncertain and somewhat terrifying quantity, it may perhaps be helpful to set down in outline what a young boy should be taught first, and what he should know at different stages, if he is, without any pressure at any time or hurry at the end, to take a good place when he is 14 at one of our best Public Schools.

By the time he is eight a boy should have been taught—

- (i.) To articulate clearly and audibly.
- (ii.) To be, when required, attentive (not for long periods, as yet this would be impossible) and to have some knowledge of the proper attitudes in which to sit and stand, *e.g.*, to know that a lounging position is not necessarily restful, and if restful not always necessary or mannerly.
- (iii.) To read quite easy books (*a*) aloud correctly, with due regard to (i.), and (*b*) to himself for amusement, and instruction by-and-by (this last, reading to himself, is a very important point very often neglected).
- (iv.) To write easy words and sentences, not fast, out legibly, with constant attention to correctness of attitude, not sprawling or curling his legs fantastically.
- (v.) To have some knowledge of the meaning of figures; at least to be able to count, and read and write down numbers up to 100.
- (vi.) Placed last, not by any means as of least importance, but because it is not always required for entrance examinations: To know in outline some of the principal Bible stories, *e.g.*, the History of Abraham, of Jacob and of Joseph, and the main facts of the New Testament.

By the age of nine he should be able—

- (i.) To read fluently any book suitable to his age.
- (ii.) To write freely (but still not necessarily fast) and to copy writing correctly from a blackboard.

(iii.) To show some acquaintance with the elements of English Grammar. To distinguish the different parts of speech, and to conjugate the two tenses of the English verb, and the commonest of the auxiliaries—at least, "I am," "I was," "I have," "I had," and "I shall."

(iv.) To read and write down numbers up to 100,000, and to do sums in simple addition and subtraction.

(v.) *a.* To read a map and have some idea of the size, shape, and divisions of the earth.

b. To have some acquaintance, from stories or otherwise, with some of the heroes of other days and other countries.

[Note.—History and Geography are unhappily not required at present at most entrance examinations. But the writer believes very strongly, in spite of learned opinions to the contrary, that, unless a boy is started in them quite young, there is serious risk that his mind will as regards these subjects remain a blank, or, after advanced lectures, a perhaps highly coloured but chaotic smudge.]

By the time he is ten a boy should—

(i.) Have made a start in Latin (he should have mastered as much of the declensions, pronouns, and regular verbs as is contained in any ordinary First Latin Book.

(ii.) He should be able in arithmetic to do, with accuracy and a fair amount of speed, examples in simple multiplication and division, each by at least three figures. This implies a sound and accurate working knowledge of the multiplication table up to 12 times.

At the age of ten a boy should begin Latin translation in an easy book with somewhat harder Latin exercises than he had in the First Book, and, *pari passu*, with every translation lesson some Latin grammar.

At the same time he should learn in English the outlines of the compound sentence so as to be able to distinguish substantival, adjectival, and the most common adverbial clauses, and pick out examples from ordinary English authors.

In these suggestions no mention has been made of French. Schoolmistresses appear rarely to find any difficulty about this. Eight years is a good age at which to begin—colloquially. A grammar, or systematic teaching of grammar, is of little use for another year. Then French and Latin grammar side by side may be made to help each other.

And no mention has been made of English poetry, singing, or drawing; because, except for the allusions to history and geography, only those subjects have been enumerated which appears essential for success in entering a Public School at the age of 14.

But just as no time is gained (but the reverse) by beginning Latin too young, or before a sure foundation of English has been laid, so no time is lost by interesting a boy almost from his

earliest years in History, Geography, Poetry, Singing, and Drawing. The Latin required at public school entrance examinations is not, or never need be, such a bugbear as to hinder any of these, or to shut out opportunities for talks and indirect lessons on flowers, birds, rocks, and the other wonders of nature, which, or at least some of which, a child must be taught to observe and love, if he is to get full happiness out of his life hereafter.

Nothing is said as to the routine of work after 11. Unless in a few special cases a boy will rarely change Preparatory Schools after 11. It is better for him not to change later than ten. But, if he is at a lady's school where boys are regularly kept till the Public School age, there is no reason why he should not stay there. The difficulties of discipline and morals inseparable from the difference of sex are not insuperable. Women have evidently grappled with and mastered the momentous games question; there is no reason at all why, when they know that there is a moral question, they should not grapple with and master that. There is some reason to suppose that a large number of women are, or at any rate have been in the past, ignorant that there is a moral question anent boys, as men understand it.

It is satisfactory that all except one of the Head Mistresses of boys' schools who replied to the queries sent them keep the supreme power and discipline in their own hands. It is absolutely essential for the well-being of a school that the real head of it should keep in his or her own hands the supreme authority in all matters of discipline and morality. It is most distinctly not enough for ladies who keep boys beyond the ages of 10 and 11 to have a responsible master to cope with the difficulties into which his sex will perhaps naturally give him a readier insight. The chief part of the teaching may be relegated to a wisely-chosen subordinate without any risk; but in matters moral and disciplinary—and especially moral—no one who does not bear the real burden of responsibility can fully realise all that that responsibility implies.

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THE PREPARATORY DEPARTMENT AT PUBLIC SCHOOLS.

THE ground which is covered at what are generally called Preparatory Schools is, at Clifton, worked by two separate and entirely distinct departments, called respectively, the "Junior School" and "Preparatory School." Of these, the latter takes boys up to eleven years, at which age they pass into the Junior School, where they remain till they are about fourteen, when they enter the Upper School. Before entering into any details of the management and arrangements of these departments, it is necessary to give a short account of their history and growth, for they were originated at different times, and the Preparatory School may be regarded as an attempt to meet certain requirements suggested by the working of the Junior School.

Clifton College was opened under Dr. Percival, the present Bishop of Hereford, in September, 1862, with sixty-nine boys, of whom twenty-eight were boarders and forty-one town boys. In the next term there were forty-six new boys, of whom twenty-six were town boys. Some of these town boys subsequently became boarders, but at this early stage of the school's existence it must be noted that the town or day boys were considerably in excess of the boarders. It appears from the Register that the formation of a department for younger boys was contemplated before the end of 1862, *i.e.*, before the end of the first term of the school's life, and the idea of a Junior School may therefore be said to date from the beginning of Clifton College. But the arrangements contemplated were not completed till April, 1863, when a small private Preparatory School was incorporated with the College, and the Junior School was opened with twenty-seven boys, of whom ten were town boys and seventeen boarders. Both Upper and Junior School continued to grow, but while in the former the proportion of the town boys to boarders showed a tendency to diminish, in the latter it steadily increased. It would seem that while the Junior School provided for the Upper School a certain number of boys who were trained on the lines adopted at Clifton, and thereby helped to keep up a high standard among candidates for entrance, it was found that in the case of boys entering the Junior at the age of from ten to twelve years there was something wanting both in the method and scope of their elementary training.

It was therefore decided to open a department which should take boys at an earlier age and so prepare them for entering the Junior School. The Preparatory School was accordingly begun in January, 1874.

The proportion of town boys to boarders in the Junior School having increased as has already been pointed out, the Preparatory may be said to have been primarily intended to supply a want among town boys, and though a Preparatory Boarding-house was opened in this year, this department was and has remained mainly a Day School. Apart from the original intention, this is, of course, the development that was to be expected, as on any theory of education the younger the boy the less obvious is the gain to be derived from the exchange of the influences of home life for those of a boarding school.

This is well illustrated by experience at Clifton, where the proportions of town boys to boarders are roughly as follows: In the Upper School as one to two, in the Preparatory School as three to one, while in the Junior School the numbers are equal. To sum up, it may be said that while the Junior School was founded almost with the College itself, the Preparatory School was founded to meet a definite want in the education of little boys living in the town. Clifton claims to have largely solved the problem of successfully educating day boys and boarders together in such a way that day boys are in no sense in an inferior position, and the inter-relation of these two elements will be found, when the detail of organisation is explained, to be an important factor in the life of a young boy at Clifton.

In explaining the organisation of these departments, it is necessary to point out first that although each of them is an integral part of the school, they are, as regards the life of the boys, entirely separated from each other. Both Preparatory and Junior Schools have severally their own school buildings and boarding houses, and the only time at which the three departments of the school are assembled is at the chapel services on Sunday, and occasionally at lectures or school concerts. The boys of one department may not mix in any way with those of another, the only exception being in the case of brothers, who may walk together on Sundays.

Preparatory and Junior boys are allowed to look on at certain school football and cricket matches, but for this purpose each has its own part of the Close. Baths and gymnasium are used by all alike, but at totally different times, so that for instance boys in the Preparatory School are being taught swimming and gymnastics while the Juniors are in school.

The Preparatory School is divided for teaching purposes into three forms of from twelve to fifteen boys each. Latin, French, English subjects, Scripture, Drawing, with a little elementary Natural History or Science, are taught in all forms, and as form subjects. For Mathematics the boys are classified separately into sets. No one learns Greek. Boys are moved into the Junior School at the age of eleven, but this, as will be pointed out later, may or may not mean promotion.

All learn swimming and gymnastics under the school instructors, and the three form-masters personally superintend the cricket and football.

There is one boarding house which takes about fifteen boys,

and inasmuch as there are no boys in this house over eleven, it forms for boys of eight or nine a remarkably easy introduction to school life.

The school hours are the same in total amount as in the Junior School, but the lessons last for either half an hour or three-quarters of an hour; and there is a break for an hour in the middle of the morning, when organised games are played. This shortening of lessons has been found with young boys to be a great success.

The Junior School is divided into six forms of from sixteen to twenty boys each. Latin, English subjects, Scripture, Science, and Drawing are taught throughout as form subjects. French is taught as a form subject in the bottom three forms, but in the upper half of the school it is taught in sets. Greek is taught in the three higher forms but is not compulsory—extra French and Mathematics being accepted as an equivalent. There is also special provision for the training of boys intended for the Navy. For French, Science, and Drawing, the Junior School staff is supplemented by masters from the Upper School.

All lessons last an hour, and the school lessons, including a Sunday lesson in the Old Testament, amount to 29 hours a week.

There are two boarding-houses of not more than 30 boys each. In each house there is a resident house tutor besides the house master. The town boys, who are about equal in numbers to the boarders, are divided into two "houses," called North and South Town. Over each there is placed a Master, who is responsible for the welfare and progress of his charge in exactly the same way as a house master in a boarding-house.

These Towns meet at least once a week, when the house master has the opportunity of speaking to his assembled "house," and of going into matters connected with their library, games, and house life.

The Junior School have their own fives' courts, and the regular games, in which all the masters of the Junior School interest themselves, consist of football (both Association and Rugby), cricket, and fives. Very great care is taken to teach boys, not only the art of cricket and football, but also the spirit in which games ought to be played. The Junior School is allowed to play one foreign match in both cricket and football, but with this exception, the interest of competition is entirely maintained by house matches between the four houses—i.e., two boarding-houses and two "Towns." These games excite the keenest interest, and, although the boarding-houses have probably on the average slightly the better of the matches, a "Town" has frequently been "cock-house," and the presence of day boys adds largely to a wholesome rivalry, in which there is no taint of ill-feeling. As a check to any possible excess of "house" feeling, and also to prevent monotony in sides, morning games are organised by houses, and half-holiday games are arranged either by forms or by some classification of the whole school.

In the boarding-houses the life is almost the same as in an ordinary Preparatory School, and calls for no special comment.

The next point which requires explanation is the way in which these two entirely separate departments of Junior and Preparatory School are bound together so as to form with the Upper School one homogeneous whole.

As regards work, this is done firstly by the arrangement of forms, which is, with one important exception, consecutive from the bottom of the Preparatory to the top of the Upper School.

This exception consists in the fact that the top of each department overlaps the bottom of the one above it. In the Upper School the lowest forms are the Upper, Middle, and Lower Third. The top three forms of the Junior School are considered parallel with these, and are called by the same name, with the addition of the letters J. S. to denote Junior School. The top of the Junior is, however, parallel with the bottom of the Upper School in more than name, for these parallel forms do the same work, read the same books, and are examined by the same examiners on the same papers. In the same way the top forms of the Preparatory, called A and B, overlap the bottom of the Junior School, and are parallel respectively with the Lower Second, and First forms. In promotion this works as follows:—A Junior Schoolboy in the Upper Third can be moved out when old enough—often before fourteen—into the Lower Fourth in the Upper School. If he were fourteen, and in the Lower Third, and not fit for promotion, he would be moved from the Junior School into the parallel form in the Upper School. A removal of this kind from one department to another would not, of course, be promotion.

Another fact which tends to homogeneity is that most, if not all masters, have during some period of their career taught in other departments. Many have taught in all three, and thus there is complete agreement in all three departments as to methods and standards of work.

Lastly, the headmaster gives a due share of his time to all departments alike. He takes each form in the Junior as in the Upper School for at least one hour a term, and he has the whole school together twice every Sunday in chapel. As regards discipline, he personally exercises authority throughout, and all serious matters are submitted to him.

In games, although the departments are distinct and never come into contact, yet the Preparatory and Junior feel that they belong to a big school, and take pride in its achievements.

From this account of the history and organisation of these departments it will be advisable to pass on and try to form some estimate of their real value and attempt to answer the question which is so often asked—Is a Public School the better for having its own Junior departments or not?

At Clifton at any rate there can be no doubt that as far as teaching is concerned the Preparatory School in every way achieves the objects for which it was founded. Preparatory boys have been taught from the first on the lines considered best throughout the school, and they have nothing to unlearn as

regards methods. They, therefore, have for years taken on the average, age for age, a far higher place on entering the Junior School than boys prepared in other schools. This superiority is equally true of the Junior boy entering the Upper School. Moreover, of the forms which are parallel in any two departments the general experience is that in every examination the better work is done by the junior of the two.

Thus the Junior School third forms will always beat on the same papers the parallel third forms in the Upper School. This is partly no doubt due to the fact that the upper forms in the Junior School represent to some extent the survival of the fittest, while the parallel forms in the Upper School may partly represent the survival of the unfittest, inasmuch as the dull Junior boys may be drafted into the Upper School before reaching a third form. But after making all due allowance for this, it is still undoubtedly true that both Preparatory and Junior boys on entering a higher department more than hold their own against boys entering from outside.

As regards the honours which are won on leaving school, it is less easy to estimate how great a share should fall to those who have passed through the Junior School; but after careful calculation it may safely be said that the Junior School boys at least hold their own. It appears, therefore, to be abundantly clear that as far as work is concerned the average boy gains considerably by entering in the Junior School, while in the case of clever or brilliant boys honours are divided, and those from good outside Preparatory Schools hold their own.

Excellence in games is a comparatively minor point, but as games are compulsory and it is obviously important that boys should learn that whatever is worth doing at all is worth doing well, the Junior School is entitled to credit for the fact that its old members contribute far more than their proportional numerical share to the school representatives in cricket, football, and gymnastics.

If one turns to the other side of the account there are, it must at once be admitted, certain obvious objections to the Clifton system.

It is undoubtedly true that in some cases if a boy is to remain at school till he is nineteen, nine or ten years at one school is too much. Some boys will be distinctly the better for a change about the middle of their school life, and will gain by coming among new companions, with a different set of associations. This is especially the case with boys who from any reason have not made the best of the earlier years of their school life. A complete change of companions and associations may help them more than anything else to make a new start in life. Moreover, to a large extent, they may be said on entering a Public School to begin with a clean sheet. Characters are, of course, sent with them, but on the whole but few of either masters or boys know anything of their previous peccadilloes or scrapes, and honest efforts to make the best of their new life will not be discounted

by a knowledge of former idleness or wrong doing. This is of undoubted importance, as the knowledge to a boy that his character is already considered unsatisfactory may be a great hindrance to reform.

At Clifton this is fully recognised, and masters are aware of the importance of not unnecessarily talking to each other of the failings of their pupils.

In the case of deliberately bad boys who do not wish to work or to make the best of their school life, the more that is known of them the better. And the Clifton system has this advantage that if such boys do come into the Junior School, they are either sent away before entering the Upper School, or if they are allowed to enter, their chances of doing harm to others by bad example are greatly reduced.

Another objection may fairly be urged against the Clifton system. The departments may be kept quite apart and yet the younger boys, it may be said, will tend to copy the manners and ways of their elders, and what in older boys may be reasonable and natural with the small boys may become affectation and swagger.

This appears to be an objection of which the force must depend entirely on the tone and the manner prevalent in any particular school. If, as may be hoped, the prevailing attitude of the older boys is that of thoroughness and manliness and modesty, this tone will be found to prevail among the juniors, and they will show the same qualities in their work and games. That the young are essentially imitative is obviously true, and the contiguity of older boys will, therefore, be a gain or a hindrance according to the character of the school.

There is another undoubted danger in the Clifton system. Junior schoolboys who become prominent in games get known by reputation, and possibly by sight, among the older boys, and when they leave the Junior School, they certainly run some risk of being spoiled by too much notice being taken of them.

Where this danger is known and realised it can to a large extent be guarded against, but if precautions were neglected, evil might easily ensue.

It is not, perhaps, easy to make any very accurate comparison between the general life at an ordinary Preparatory School and at the Junior Department of a school like Clifton, but of late years so much capital has been put into the Preparatory School profession that such schools will probably quite hold their own in general equipment and the accessories of school life, so that they will all alike have their swimming baths, fives' courts, cricket grounds, and sanatoria.

If anything there will be slightly less luxury in the life of the boy at the Public School, but there will be more abundant provision of the more expensive apparatus of education, and Junior School boys will reap some of the advantages of museums, laboratories, facilities for music and drawing that are primarily intended, and organised on a scale suitable for a large school of four or five hundred boys.

Further, it is not unimportant that boys should at an early age become acquainted with a correct standard of excellence in all the occupations of their life.

Under the Clifton system a boy is perhaps less likely to form an exaggerated idea of his own proficiency than he might be at an ordinary Preparatory School. On the other hand, as has already been pointed out, the really good boy, unless precautions are taken, will run at the Public School a greater chance of receiving undue attention or adulation from his schoolfellows.

There is, however, one very definite advantage that the Clifton system presents to those who value education in the true sense of the word. Nearly all Preparatory Schools suffer from having to prepare boys for examination at far too early an age. Such schools are judged by their successes at Scholarship and Entrance Examinations, and in many cases the education of other boys suffers in consequence. At Clifton the Junior and Preparatory Schools are hampered by no such requirements, and the whole routine and scheme of work is laid out simply with a view to prepare each boy according to his ability to take his place in the department above. No public examination disturbs the teaching of the term, and the success or failure of boys and teachers alike is tested not by any particular examination in the school so much as by the general average of success attained by all the Junior boys during the whole of their career at Clifton.

A. T. MARTIN.

THE PREPARATORY DEPARTMENT AT A PUBLIC SCHOOL.

In January, 1885, at the request of the headmaster of a well-known Public School in the suburbs of London, I undertook to organise a Preparatory School in connection with it.

This school was one in which the day-boy element was so far in excess of the boarding one that it might for all practical purposes be called a day-school, and it was, therefore, virtually certain that the Preparatory department would resemble its foster parent in the same respect. This turned out to be the case.

In founding a Preparatory School my headmaster had in view the better preparation of boys entering the parent school, and, if possible, the establishment of a higher standard in the lower forms of that school. He had felt that the standard of work aimed at by the majority of the numerous Preparatory Schools in the neighbourhood was not high enough, and that in consequence too much of the elementary work which should have been done in them had to be done in the lower forms of the big school itself.

The history of this Preparatory School has so far been one of quiet and unbroken success. Beginning humbly as it did with a small class of seven boys it rose in numbers slowly but surely, and there were over 60 members at the end of two years, when my connection with it ceased. After a lapse of 15 years it now numbers over 200, and has at any rate fulfilled one of the objects of its foundation, seeing that few of its members fail to reach at least the third form in the larger school, and nearly all the junior scholarships in that school are won by boys prepared at it.

It cannot be claimed for the Preparatory School that it has raised the standard of the lower forms in the larger school, but it does act as a valuable feeder to that school, seeing that 90 per cent. of its members proceed there and that very few of them are to be found in its three lowest forms.

The management of the Preparatory department is left entirely to the discretion of its headmaster, who, though appointed by, and of course directly responsible to, the headmaster of Dulwich, has a free hand in all matters relating to the staff, the work taught, and the general discipline of the department. The only practical supervision exercised takes the form of a yearly examination, in which the papers are set and looked over by masters of the College itself. The headmaster also reserves to himself the right of being present at lessons and of testing a class personally at any time—a right rarely, if ever, exercised.

The limit of age of admission to the College from the Preparatory School is 13, the average age at which boys proceed to it being $12\frac{1}{2}$ years.

The Preparatory department has a part of the College grounds allotted to it for a playing field, and the College gymnasium and swimming bath are also open to its members at certain fixed times.

Any attempt to decide the relative merits of the Boarding School and Day School system must be open to criticism. The following remarks must therefore be taken as the result of my own experience, and in no way as a statement of universal or incontrovertible facts.

First, the head and his staff are brought into closer personal contact in a Boarding School, and the more intimate relations thus established enable him not only to improve the organisation in a way he could not otherwise do, but also to learn more from his staff about the boys than he could do in a Day School.

Further, the lower fees in a Day School do not allow its headmaster to provide so large a staff, in proportion to the number of boys, as would be the case in a Boarding School, while the larger numbers which generally exist in a Day School is another factor militating against a thorough knowledge of the characters and dispositions of the boys.

Indeed, this incomplete knowledge of the boys by their master is one of the chief drawbacks to the Day School system. It may be said that the master has the direct assistance of parents to help him to deal with his charges; but in how many cases is that assistance wisely given? Is dual control ever satisfactory in its results?

A schoolmaster has greater experience than the ordinary parent in dealing with boys. It is, so to say, his business to watch his charges with a view to suppressing, to the best of his ability, not only what is actually bad in them, but whatever is mean or only unsatisfactory, and to encourage and develop whatever is good in them. It becomes a difficult task to do this when he has them under his control for half only of their school life, and that perhaps the least instructive part so far as it affords any insight into their character.

One of the most valuable instruments a master has in dealing with boys is the tone of the school. When a healthy tone exists, there are very few members who are not affected by it. If it is considered cowardly to tell a lie, disgraceful to be impure, ungentlemanly to be dirty and untidy, the feeling of the school will help many a boy whose tendency may be towards what is wrong. Such a tone is far more easy to create and to maintain in a Boarding School than in a Day School, though it must be confessed that the term easy is only used relatively. It may be comparatively easy to create this tone in a Boarding School, but it requires unceasing effort to maintain it, and the task in a Day School is generally even more difficult. The temptations and opportunities for wrong-doing are so numerous away from school that, unless his home is an exceptionally good one, the

day boy is far more likely to be neglected and go astray than is the boarder.

Such are a few of the salient points of difference between the two systems as they appear to me. Without professing to be infallible in any way, I am sure that many of my brother schoolmasters would endorse my views, and the prevailing fashion of sending boys to Boarding Schools, now so general, seems to point to the fact that many parents would also support me.

T. H. MASON.

TABLE showing the number of hours given to the various subjects taught in the Preparatory Department.

FORM.	VI.	V.A.	V.B.	IV.	III.A.	III.B.	II.A.	II.B.	II.C.	IA.	IB.
Latin	6	7½	9½	8½	10½	9½	9½	10½	9	10½	8½
* Greek	6½	4	—	—	—	—	—	—	—	—	—
† English	6½	6½	9	9	9	9	9	9	9	10½	2½
French	4	5½	4	4	4	4	4	4	4	—	—
‡ Mathematics ..	9	9	9	9	6½	6½	6½	6½	6½	6½	6½
Singing	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾
Drawing	—	—	—	—	—	—	—	¾	¾	¾	¾
Writing	—	—	¾	¾	1½	1½	1½	1½	1½	2½	2½
Dictation	—	—	—	¾	—	¾	¾	—	—	—	—
Gymnastics ..	1½	1½	1½	1½	1½	1½	1½	1½	1½	1½	1
Drilling	—	—	—	—	—	¾	¾	¾	1½	1½	1½

* Or German.

Bible, English History, Geography, Repetition, English Grammar, and Literature.

Arithmetic. Euclid, Algebra in Forms VI. to IV. Arithmetic only below Form IV.

THE RELATIONS BETWEEN PUBLIC AND PREPARATORY SCHOOLS.

IN view of proposals for important changes in the general system of Secondary Education it seems pertinent to consider briefly the relations that existed in the past between Public and Preparatory Schools, to compare them with those which now obtain and to indicate some points in which further progress seems desirable.

Preparatory Schools in the strict meaning of the term may fairly be taken to mean only those which prepare boys exclusively for entrance to the Public Schools or the "Britannia" between the ages of 9-14. It is true that in some cases boys go earlier than nine to their Preparatory School, and in some Public Schools where the age of admission runs up to 15, as at Winchester and Rugby, they stay over 14; but, as a matter of fact, the average boy comes somewhere about 9-9½, and leaves between 13½-14.

Such Preparatory Schools are in all essential matters worked upon the same lines as a Public School. The masters are almost exclusively university men; the class of boys is the same as will later on be schoolfellows together; the curriculum is largely, if not entirely, moulded on the requirements of the Public Schools; the tone and *esprit de corps* are formed and fostered on the best traditions of the great schools by men who have themselves lived in them; in a word, the Preparatory Schools are not only the nurseries of the Public Schools but actually their lower forms.

It is, then, natural that the relations between them should be close; few, indeed, would deny that the closer and more confidential they can grow to be the better for all concerned, whether masters or boys or parents.

And in this respect of growth in more intimate relationship there has been during the last ten years a markedly happy advance. Before that time there was very little communication between the Public Schools and the bulk of the Preparatory Schools. Each Preparatory School was practically a thing apart, and depended for its relationship to all other educational bodies entirely on the individuality of the headmaster and his acquaintance or friendship with the heads of the various schools into which his boys principally passed. There was no cohesion of any sort among the Preparatory Schools; each was a law to itself, and each headmaster did precisely what was right in his own eyes. No attempt—none at any rate that had met with success—had been made to bring together and federate for the common good the experience and the ideals of a large number of devoted and enthusiastic teachers, nor to establish any *esprit de corps* among a rapidly increasing body of men who were spending all their energies (in addition to all their available resources) upon this particular branch of educational work.

A feeling that such a want of co-operation was not only in itself a pity, but that it also seriously prevented any promising attempt being made to alter conditions of various kinds that were felt to prejudice some of the best work in Preparatory Schools began gradually to develop. Happily this was much encouraged at the Headmasters' Conference held at Oxford in December, 1890, when the present Bishop of Calcutta, then Headmaster of Harrow, proposed:

"That it is desirable to make the relation between Preparatory and Public Schools somewhat closer and more systematic."

This proposal was received with general approbation, as was also a rider to the effect, "That the committee of the Conference should be requested to bring the matter to the notice of Preparatory Schoolmasters, and to invite them to consider whether by some representative organization they might put themselves in fuller communication with the schools represented at the Conference."

The problem, however, still remained of how best to bring Preparatory Schoolmasters together, seeing that up to that time they had been inclined to regard one another rather as rivals than as fellow-workers in a common field of labour. The solution of this difficulty is worth recording. By a happy inspiration it occurred to a Preparatory Schoolmaster that a much debated question in cricket for young boys might, perhaps, furnish the means of a preliminary conference. This proved successful and a very cordial meeting in March, 1891, in London, at which nothing but cricket was discussed, ended in a resolution to give the alteration that had been decided on a trial during the ensuing season. A request was made that one of those present would report upon the result of the experiment in the winter, and the meeting broke up with the laughing remark that probably upon no other subject but cricket could Preparatory Schoolmasters have been induced to meet in this way!

After this it was simple, as well as obvious, when the time drew near for the report to be made, to suggest to all those who had been informed of the cricket discussion that perhaps there were other subjects of common interest which might also be considered. This found favour, and it was decided that on the morning following the discussion of the cricket question, a conference should be held. About seventy Headmasters of Preparatory Schools met in London: a constitution on the lines of the Headmasters' Conference was proposed and agreed upon, and an executive committee was appointed. Thus by the suggestions of the Headmasters' Conference and the coincidence of a strong desire for greater union from the Preparatory Schoolmasters themselves the first Conference of "The Association of Headmasters of Preparatory Schools" was held in December, 1892. And it is surely not the least notable service that cricket has rendered to England and to English education that it was a main agent in making such a work possible.

One of the first actions of the committee was to inform the Chairman of the Headmasters' Conference of what had occurred,

very largely in accordance with their wish and at their suggestion, and to express the hope that opportunity might be found to discuss together matters of common interest in their work. A very sympathetic reply was received, and thus a great advance was possible.

Since its formation the Association of Headmasters of Preparatory Schools has steadily increased in numbers until now there are more than 280 members. It is the recognised channel of communication between the Government and other educational bodies and the Preparatory Schools, and membership may be taken to imply the desire to be able to give expression as a body, and not simply as individuals, to their views upon the many pressing educational problems of the day.

Several meetings have taken place between representatives from the Headmasters' Conference and the Association, and questions of great importance have been discussed. Among such have been the curriculum for young boys; the subjects of examination for entrance and for entrance scholarships at the Public Schools; the age of entry; the need for training of hand and eye and ear; and others no doubt will be brought forward when more general agreement about these has been reached. But in every case it is a pleasure as well as a duty to record that the views of the Preparatory Schools, as expressed by their representatives, have been most kindly received and carefully considered, even where they did not command immediate assent, and thus a great step has been taken to put the Headmasters of Public Schools in possession of facts which they cannot have known previously to the same extent, and to set before them far more cogently than could possibly be done by individual effort the many problems which a Preparatory Schoolmaster has continually to face.

But notable as the advance has been, much still remains to be done before Preparatory Schoolmasters at all achieve their ideal of the relations between the Public Schools and themselves.

Some of these questions may be briefly indicated here.

First of all stands the need of a fuller and completer interest on the part of the Public Schools concerning the early life and training of their younger boys. It is surely idle to argue now that it is better *not* to know what has passed before a boy's entrance to his Public School, because to know is to be prejudiced against him or biassed in his favour, and that it is better, therefore, for the Public Schoolmaster to find out for himself from his own experience what sort of subject he has to deal with. Not only is this to disregard for all practical purposes the work of the Preparatory School and of the home, but it is a refusal of co-operation at one of the most critical stages in a boy's life, which must sadly mar any real attempt at unity of purpose or continuity of life in what should be a progressive training of character. It is, therefore, essential in the view of Preparatory Schoolmasters that such mutual confidence should exist as shall enable a boy to pass on as naturally as possible from his Preparatory to his Public School. The ideal is a complete *rapprochement*.

in the relations between those to whom parents have entrusted the education of their boy *as an individual*, the problem of whose future can only be efficiently worked out by the co-operation of his masters and their collaboration in many details; certainly not by want of sympathy, or by distrust, or disregard of plain indications to certain tendencies in early life.

Again, there often comes home strongly to the Preparatory Schoolmaster the claim of the *average* boy to more consideration. So much of the curriculum in school, so many of the games out of school, are planned for and determined by the powers of the scholar or the exceptional athlete—just the boys who under any circumstances are sure to be able to take care of themselves, even if for other obvious reasons they were not always secure from neglect. Accordingly the average boy not only often escapes notice in the crush—that is perhaps not of such particular consequence—but the routine of his life is mainly dependent on the capabilities of cleverer and stronger boys, and he perforce does not flourish even if he succeeds in maintaining a rather hopeless struggle to the end of his time so far as actual school work is concerned, and if he should, while intellectually weak, be successful in games from physical strength, his case cannot be counted as wholly satisfactory. He has gone through school with little, if any, real interest on the intellectual side, very often because no real attempt has been made to develop his intellect except in certain directions, which for him were always unattractive. His school time has been taken up almost exclusively with linguistic training and mathematics, each and all to him slightly different forms of drudgery. Practically no continuous effort has been made to train his hand or eye or ear, even in obvious default of any sort of probable success on the ordinary lines; and so he leaves school with no sort of sympathy existing between his work and his life, without accurate knowledge of any single language on which he has spent so many years, and though very possibly fond of games and even proficient in them, and often with high character and in all senses a typical, honest, fearless English gentleman, still not exactly what could be described truly as an educational success. And yet had there been more care for him as an individual and more thought for him, as from the first manifestly only an average, rather dull boy, without aptitude for languages, and therefore needing a different training, how much power and interest might have been added to his life.

Yet another matter of great importance, and one closely affecting the relationship we are considering, is that of the age of entrance to the Public Schools. The Association as a whole is prepared to give solid reasons for entrance not being advisable as a rule before 13½; not from a selfish point of view, but on moral, intellectual, and physical grounds in the case of the large majority of their boys. Here, again, mutual confidence in the relation between the Public School and the Preparatory Schoolmaster would be most valuable, and would be of real service, not only to the individual boys concerned, but to the

maintenance of that high tone in both stages of school life which masters in both have so much at heart.

No Preparatory Schoolmaster would, of course, advocate such reforms as are implied here except on the understanding that he on his part must enter with at least equal readiness and open-mindedness upon such improvements in his methods and general training as might be pressed upon him from the Public Schools. Indeed the present writer makes bold to assert that the Preparatory Schoolmaster is prepared for criticism—nay, is even anxious for it—but does not get it unless he asks for it directly. It is obvious that the results of the training at the Preparatory School must appear in the Public School, and that there must be many points upon which a frank exchange of opinions would be most helpful, especially since the means for such communication either upon general or special matters through the Committees of the Conference and the Association by correspondence, or better still by a joint Conference, are now available.

There can, in the writer's opinion, be no question of the earnest desire of the Preparatory Schools to be absolutely loyal to the Public Schools—to work for them and with them in every way that they conceive to be in the interests of their boys—and not to trench on their undoubted prerogatives or interfere in their general methods. But, on the other hand, they do venture to urge with all the force at their command that in certain particulars they know best where the shoe pinches, just because they have to wear it every day, and that on such questions as the number of hours of work desirable for the average boy of 9–13½, the number of subjects that can be honestly taught with the prospect of laying a really sound foundation in each of them in those hours, the best age of entry for the average boy to his Public School, the desirability of developing powers of observation and of training hand, eye, and ear, the Preparatory Schoolmaster who has made such things the work and study of his life, is really in the position of an expert, and may now claim reasonably, without exaggeration or want of modesty, the right to be heard by those whose experience has been confined almost entirely to boys of 13½–19.

To sum up—if the improved and improving relation between the Public and Preparatory Schools can be set firmly on a foundation of a real desire for co-operation with open minds and mutual confidence in common counsel, there will indeed be good hope of the attainment of that “right judgment in all things” which above all else is surely essential to deal with the many pressing needs of English education.

HERBERT BULL.

THE PREPARATORY SCHOOL PRODUCT.

FROM THE POINT OF VIEW OF A PUBLIC SCHOOL MASTER.

I am not using a form of words when I say that I could have wished that the choice of the editors of this volume had fallen upon some one better qualified than myself to write this article. To deal with the subject adequately one needs long and wide experience, less as a headmaster than as a housemaster, and above all as a housemaster who, not being a headmaster as well, has been able to give a great deal of his time out of school and his undivided interest to the boys in his house, above all to the younger members of it. As, however, I am begged, notwithstanding the absence of this qualification, to write, I will do what I can, if only from a sense of the deep debt of gratitude which the public schools owe to preparatory school masters.

For there can be no question that the whole face of public school education has been changed since the days when it was the common custom to plunge little boys of 8 and 9 without any preparation into all the dangers and difficulties of a great school. I do not go back to that period. When I began work at Marlborough thirty years ago, the preparatory school was already a recognized institution: less universal, however, and less thoroughly organized by far than now. At that time it was possible—as it is possible in a much diminished degree still—to compare the preparatory school product, as handed on to the public school, with the product of home training, or of individual tuition, or of the local grammar school (or private school), where boys of all ages attended.

Even then there was no doubt as to the superiority of the training from the strictly educational point of view. Ten years earlier a contemporary of my own, a boy then as he is a man now of conspicuous ability, had been told on arriving at a great school to try for an entrance scholarship that he might as well go home again if he had not been to a preparatory school. Even in these early days, moreover, the cry was not unknown of cramming and overwork, and it was said that boys thus specially prepared often failed to fulfil their promise: but we found that the excellent grounding in grammar, in the principles of composition, in the elements of mathematics, and so on, in the case at once of abler and less gifted boys, were an abiding foundation which made the superstructure sounder and the process of building it up infinitely easier. Since those days, in spite of many difficulties caused by the differing requirements of different schools, by shortness of time and inequality of material, a systematic preparation has been gradually developed: and the results of it are evidenced less by success in examinations, whether competitive or qualifying, than by the way in which boys thus equipped at the outset of their school career usually go through it creditably and with

satisfactory results, even where they possess no singular capacity. It is perhaps these average boys who owe most to their early preparation. Exceptional ability will assert itself, even though its start be unfavourable: ordinary powers cannot afford to be handicapped in the race of school any more than in the race of life.

Before leaving this part of my subject, I should like to say a word or two on the charges, frequently brought against preparatory schools, to which I have adverted above—of cramming and overwork.

It is sometimes assumed that if a number of instances can be adduced where boys—more especially scholars—have after joining a great school ceased to maintain the superiority to others which they showed in the scholarship or entrance examination, such boys must have been crammed with knowledge which they never properly digested, or else that nature, overwrought by long hours of study at a premature age, has asserted herself by a reaction in which the brain remains torpid and inactive.

In a certain proportion of cases—not a large one—one or other of the charges may be true. I know preparatory schools where boys are “crammed” for scholarships: there may be others where they are overworked, though I do not know them. The word “cramming,” however, requires definition. Some “crammers” are admirable teachers: and the term ought not to be applied without discrimination to tutors who avowedly prepare boys for special examinations. We are probably all in a measure “crammers” in this sense. But cramming in its proper and bad sense is marked by two characteristics: (1) excessive attention to one or two branches of a liberal education *to the neglect of the rest*; and (2) the imparting of mere information as distinguished from educational principles, the use of the “tip,” the *memoria technica*, and the rest of the equipment of the false educator, including the art of studying and playing up to the idiosyncrasies of different public school examiners. In some measure these examiners have themselves to blame if they fall victims to such artifices. It may be hard, (*e.g.*) in a grammar paper, not to leave scope for the exercise of them, but in most examinations they can be largely eliminated.

But in the preparatory schools which I know most intimately “cramming” in its bad sense is not practised. No doubt the examinations which the boys have to pass are kept carefully in mind during their preparatory training, and certain points are emphasized and have special time given to them; but there is no neglect of important side-subjects; and the teaching is good and carried out on rational lines. The cases of arrested development to which I have adverted above are many of them to be accounted for by quite other causes than those to which they are commonly attributed; to new surroundings and methods of teaching, to the physical changes which occur at this time of life, to the withdrawal of the stimulus of the entrance or scholarship examination and the like. Nor am I casting any slight upon public school masters when I add that there may be cases where the preparatory school-master is a better teacher, and that in the

highest sense, than the form-master with whom a new boy is placed. Hitherto the boy has had the advantage of more stimulating teaching, and has in consequence shot ahead of his equals in ability elsewhere: deprived of it, he sinks back to their level. Of course the reverse case is not unfrequently to be found: and then the boy mounts rapidly in his new school.

I turn now to training of other kinds. Not long ago I was told of a complaint addressed by the mother of a boy sent much too young to a public school to the matron of the house in which he had passed his first term, to the effect that he had come home not knowing how properly to wash himself or brush his hair. The reply was obvious. But it is just such lessons as these—in the social alphabet—that are taught efficiently and well in preparatory schools. A training in cleanliness, in personal neatness, in carefulness about the elementary laws of health, in orderliness, and resourcefulness in little things, cannot be begun too early. It should be begun in the nursery, but it is often left to the preparatory school to instil its very rudiments. Postponed, at least in some of its details, to the time when the public school is entered, it can only be learnt by imitation of or rough reminders from school-fellows, and a hint now and then from a matron, who cannot from the nature of the case be fully informed about the operations of the dormitory. The age at which a boy should go to a preparatory school is a difficult question. In some homes it is doubtless difficult to arrange for proper teaching to be carried on. But, as a general rule, there should be time allowed for home influences to do their salutary work. It should not be forgotten that the tendency of all schools is to turn out boys of one stamp or mould. Conventions are masters of the situation, for good or evil. The levelling process should not begin too soon: or by the time a boy gets to a public school everything may have been levelled down that is most worth having in a boy's character.

More important still is the question of moral training. Very young boys have not unfrequently, as all schoolmasters know, a very imperfect sense of honour, of truthfulness, of honesty and the distinction between *meum* and *tuum*. It is far easier to create and to foster such a sense in the simpler atmosphere of a preparatory school than in the more complex surroundings of a public one. Few boys now come to us on whom some impression has not been made in this direction.

The older and higher boys in preparatory schools are often entrusted within obvious limits with power and responsibilities which doubtless have in most instances and in the long run an effect on their character. But this practice has its drawbacks. It may be questioned whether boys at this stage are not too undeveloped to bear the strain of such responsibilities, to understand their nature or importance. There is a danger of a premature appeal to the half formed sense of honour scaring the conscience, and rendering it callous when, later on, the appeal ought to make its impression. A boy may become morally *blasé*; further it should be remembered a boy so trusted finds himself a nobody

when he joins his greater school; and the revulsion—almost parallel to that which takes place when a sixth form boy goes to the University—is in some cases hurtful. *Corruptio optimi pessima.*

On morality in its narrow sense there is much to be said. Given the best tone in the world amongst elder boys, the knowledge of sexual facts cannot be long delayed, and knowledge means discussion of them. I need not point out the danger, arising from this cause, of the learning of bad habits by younger boys in such a community before they are fully conscious of their significance. It was great in the old days of mixed ages: it is very far from absent now. The preparatory school master who can keep his school pure, and who warns his boys when they leave him of the dangers to come, is discharging a duty the value and importance of which cannot be exaggerated. On the other hand, there is no greater peril known to the boarding house master of a big school than the presence in his house of boys who have been corrupted and familiarised with impure ideas before entering it. I have known schools from which housemasters have dreaded to receive boys. Happily they are few; in the majority of cases preparatory masters are fully alive to the risk and the responsibility. Even among quite young boys there is a danger of contamination from the presence of one or two who have somehow or other learnt all too soon what they should not; yet it is, I believe, in the large majority of instances guarded against and minimised. If boys thus protected in the early stages of their education fall later on, it is the fault either of special proclivities to vice or of untoward surroundings in their later school.

A few words may be added about the preparatory departments of great schools. There is often an objection raised and felt to them to the effect that the boys cannot but mix, and that not to their advantage, with their older neighbours. I do not think that this is the case in any well managed school: the two departments are habitually kept distinct, and little is known by the one of the other. On the other hand, something is gained by the fact that the system of the one is identical with, or leads naturally up to that of the other. For such special purposes as a Navy class, where boys are prepared for an examination to be taken at an early age, such an educational ladder is most valuable: and if we take a broader outlook, it is not easy to see that there is any serious flaw in the system.

I have said, I hope, enough to show what to my mind are the advantages of the preparatory school system as well as its drawbacks. There are few housemasters of public schools who will not agree with me that the gain is far greater than the loss, and that in the system we have much that tells for manliness and much that helps us to combat evil and to foster good.

H. A. JAMES.

THE PREPARATORY SCHOOL PRODUCT

FROM THE POINT OF VIEW OF A PUBLIC SCHOOLMASTER.

Any attempt adequately to discuss this subject is beset by one serious and almost insurmountable difficulty. Though the term "product" is often used with regard to the results of a system of education, it is obviously liable to mislead unless care is taken to make it clear that the term cannot be employed with any very distinct connotation. In horticulture and mathematics there is no doubt as to the exact meaning of the word; but in all educational observations it is excessively difficult to separate the effects of nature from those of nurture; and this remark is true if the area under observation is no wider than the home. If in the case of an individual boy there is a reason for wishing to diagnose the results of his school life as well as of his home training, the difficulty of attaining accuracy is enormously enhanced. It is well known that if anything goes wrong the school is generally blamed by the parents, and the home is blamed by the schoolmaster; and this kind of recrimination could not exist unless there were considerable difficulty in adjusting the responsibility for the ultimate result. But if anything could increase this difficulty to an almost indefinite extent it would be if the term product were used to cover not one boy and one school, but a multitude of boys from a multitude of schools, and the question were asked as to what estimate could be formed of the effect of the school training on the whole number. It will be at once seen that the question assumes that there is an effect on young boys distinct enough to be observable in a large number, in spite of the fact that the schools through which they have passed are very various in tone, equipment, and aim; only less various than the homes from which they have originally come.

There are, however, two considerations which somewhat mitigate the difficulty mentioned, though they do not by any means wholly remove it. The first is as follows:—If the question is put quite simply, what is the difference between young boys who enter the public schools now, and what they would be if they had never been to any preparatory school at all, any schoolmaster would feel that in spite of the theoretical impossibility of gauging results, yet he is pretty certain that there is a difference, and also that he is prepared to say, approximately, in what features of the schoolboy's character it manifests itself. That is to say, there are some broad general characteristics of English schoolboys of 13 and 14 years of age which a tolerable consensus of opinion attributes to the school training which they have undergone. And thus it becomes possible to indicate what those

characteristics are, and to suggest, however tentatively, some points in which improvement seems desirable. The second is even more practical in character. Instead of hesitating, owing to the difficulty of separating the three different elements of heritage, home training and school life, which combine to make up the boy of 13, it would be advisable to abandon the attempt and indicate broadly what the English boy of that age generally is: how far equipped for what lies before him; how far orderly in his development and capable of progressing satisfactorily through the time of youth. Doubtless any criticism may be met by the objection that the blame lies with the home, and the school is powerless to undo the effects. Still, it may be not unprofitable to approach the subject from this side. Though other husbandmen have had a large share in the product, the preparatory schoolmaster may be interested to learn what others think of his pupils as they leave his hands.

Probably the symptoms which do not require any special insight will provoke least disagreement, and the one we will first select is very easy to verify and highly important. It is that, as compared with those of 30 years ago, the modern boy comes to the public schools prepared to deal with the masters as with human beings and friends. Formerly they were to him neither the one nor the other. High-spirited little boys, accustomed to geniality and kindness at home, were flung into the clutches of a strange assortment of middle-aged men, mostly without any boyish instincts left in them. In the large public schools they were simply scholars: in the humbler order of Secondary Schools they must have been in many cases men who had drifted from one obscure means of livelihood to another till they took refuge in the ample harbour of school-teaching, tolerably secure that, whatever their want of fitness for the work may have been, immunity from disturbance was provided for them by the dense lethargy of public opinion which reigned throughout the country. And in those days no widely prevalent system of Preparatory Schools existed at all for the formidable task of getting little boys ready to meet this repellent order of pastors; and the boys were not got ready in any way. Hence, as soon as they found themselves in these strange surroundings they adopted an antagonistic and suspicious attitude towards their teachers. The astonishing change which has taken place is more visible in the modern Preparatory than in the Public Boarding School; but it is very marked in both. The result is an immense increase of confidence between boy and man; in other words, the growth of a true pastoral relation between them. At a large Public School, 35 years ago, a youth looked round on one occasion at the whole staff of masters gathered in chapel and settled in his mind that there was not one to whom he would go in any difficulty. Nowadays this could not happen in any Public School, though it may be admitted that there is room for a vast amount more of wise and sympathetic handling of boys by masters. But the change is a momentous one, and it has been largely assisted by the remarkable care taken of small boys in their first schools.

It is obvious that this important service rendered by the smaller schools to the larger ones is capable of much extension. As the spirit of co-operation between the different orders of schools gains in power, we may expect to hear of the frank communication from one master to another of all that is necessary for him to know about the pupils which are being transferred between them. A great deal more might be done in this way than is done, and for the deficiencies, both sorts of masters are in different ways responsible. Those in the more secure position, free, to a large extent, from the manifold vexations of competition—namely, the public schoolmasters—have not always been quick to understand the difficulties and embarrassments which their preparatory school brethren have had to meet. It has not been easy in the past for the latter to speak quite freely about the boys who were leaving their schools. Frankness has seemed not unlikely to involve risk of loss of good name to the preparatory school, which, of course, spells ruin to its owner. And if such letters as have been written have frequently betrayed signs of this misgiving, and have erred on the side of a cautious optimism in the estimate of character transmitted to the public school, there was no need for the latter to conclude that all letters of the kind would be useless, and to throw cold water on the friendly assistance which had been rendered.

A question of much interest and importance presents itself at this point. Granted that the care and supervision nowadays given to the younger boys are still capable of improvement and extension, yet they have been in operation long enough to show in what respects we may look for evidences of their influence. If little boys are now looked after with close and unwearied vigilance—as is certainly the case in many Preparatory Schools—what are the results so far?

The intellectual results have already been to some extent considered, but it would not be amiss to point to the greatest defect in the ordinary public school boy's mind, and to inquire whether anything in the preliminary teaching is likely to favour it or to counteract it. It is the same to-day as it has ever been. The enormous majority of boys detest the effort of thought which belongs to the surmounting of a real difficulty. It matters little what the stimulus may be in the shape of prizes for success, or what the threats which await failure. The fact is patent to every schoolmaster that sooner than think consecutively or patiently elaborate and thoroughly subdue a difficult sentence or a mathematical problem, nearly all boys of all ages of boyhood will go through hours of barren, soulless drudgery so long as they can convince themselves that they are covering the ground somehow and doing something praiseworthy. A prominent characteristic of adults in England is to shirk details, to jump to conclusions with as little of laborious effort as possible. It is curious that while we succeed in many parts of the globe by showing intelligence and zeal, but little method, the little boys of the country in their school work show method and

zeal, but little intelligence. It is a strange fact, for instance, that a certain proportion of new boys in their mathematical entrance examination papers will always divide in long division by 2 or 3; and that a paper is now in existence where the process of dividing by 1 in long division was carried on from the top to the bottom of the page, when the paper was shown up; the writer being unvexed with any misgiving as to the ultimate issue of his somewhat monotonous toil. In the same way in Latin and Greek the ideal of nearly all boys is to prepare sufficiently to escape censure or ridicule, and then wait to be told the sense by the form-master. They will then take steps to learn it up for the examination at the end of the term, but their thoughts very rarely indeed rise to the level from which they can contemplate a difficulty surmounted without aid. It is clear that we have here presented to us a problem of very great intricacy, and one which demands the closest attention on the part of the Preparatory schoolmasters. If at 13 years of age a boy shows himself willing to listen to any extent, to write to any amount, and to read up anything set him for reproduction, it points apparently to the fact that his efforts up till then have been mainly mechanical, and that the delight of unaided thinking is strange to him.

This is perhaps not the place for a discussion of the problem in its details, though a few broad considerations may be set out. One of the greatest difficulties connected with it consists in the fact that up to the age of 13 or 14 the rational faculties are so much in abeyance that a premature appeal to them may be mischievous, or at least useless. It is the time of life when the memory may be advantageously employed, but the ratiocinative processes of the brain are very slight, shallow, and discontinuous. Thus an experienced teacher knows that in such a subject as history it would be folly to call upon little boys to reason upon facts of constitutional history. The best that can be done for them is to present the external facts of the life of the country in as vivid a form as possible. Hence the great extension of the use of the magic lantern in history and geography lessons, and to a considerable extent such experiments as these have no doubt succeeded. But where the failure seems to be is in the gradual transition from these processes of imparting information suitable to tender years, to the more complicated problems which insists on reflection, comparison, inference, and imagination. Somehow the eagerness with which the elementary efforts at imbibition were made, continues slightly abated into the early years of adolescence; but in a very large majority of cases teachers have not yet been compensated for the loss of memory and physical vigour which is noticeable often during the period of growth from 14 to 16 years of age, by any increase in the willingness to think. Nature seems to indicate that the period of merely gathering facts should be succeeded by one of growing reflection, or of sorting the facts. But though the zest in acquiring facts seems to diminish, it cannot be said that the power of sorting those already acquired promises well. Indeed it is noticeable

that as late as 20 years of age the notion that training the mind means anything more than acquiring more facts has, generally, hardly begun to be formed.

Now, it may be that the various and successful devices resorted to for the purpose of making knowledge attractive in the early years of school life, have had the undesirable effect of making the initial stages of thought processes more arduous and repulsive than they otherwise would be. And yet the devices are useful and must not be abandoned. What is to be done?

Briefly speaking, it seems clear that there need be no risk of over-stimulating the thinking faculties, so long as the human power of resistance to suggestion remains what it is. And, moreover, the difficulties that have to be met are really twofold. There is first and foremost the reluctance to hard sustained effort generally necessary to thorough workmanship of any kind, and secondly there is a marked feebleness in the thinking faculties which seems to manifest itself long after the age at which thought ought to be developing has fairly begun. The young Englishman fails often in laboriousness, but still more often in intelligent reflection. If, therefore, the age of the Preparatory School boys is not fitted for the training of the reflective faculties, it follows that the deficiencies noticed will be most safely dealt with if the teachers at these schools devote their best attention to the problem of securing a constant presentation of suitable difficulties to their pupils, and of insisting that these difficulties shall be surmounted with as little help as possible. Of course, every schoolmaster knows the many obstacles that confront any such endeavour as long as boys have to be taught in class. But none the less a good deal could be done if this paramount necessity were by all habitually borne in mind. It can hardly be conceived that the present proportion of youths who cannot bring themselves to grapple in deadly earnest with an intellectual problem, is fixed by any ordinance of nature, and if not, then it is certain that it can and ought to be diminished, and, if it is to be diminished, then it should be judiciously dealt with from the earliest years of school life onwards. It would not be easy to suggest a more fundamental question for the teachers to work out in the light of their special experience. The handling of it must obviously produce a direct effect on the moral as well as the intellectual calibre of the nation. Englishmen are prone to admire their national good qualities, and often self-reliance and grit are spoken of as the outcome of our Boarding School system. Nevertheless, no one can be acquainted with boys in any large number who does not speedily learn that, whatever may be the case with a fairly large minority there is a majority, who through their boyhood and on into adult life give frequent and unmistakable proof of a certain deficiency both in mental and moral robustness, which is far greater than should have been expected, or than we should be prepared to acquiesce in. And it is undoubtedly an obligation resting on all experts to consider carefully wherein the modern systems of teaching tend to foster this weakness and to healthily counteract it.

A few words may be added here on the more exclusively moral tendencies of some characteristics of Preparatory Schools. If in later life a shrinking from mental effort may be traced to the intellectual dependence encouraged earlier by the excessive amount of help given to lessons, so there seems to be good reason for attentive scrutiny of the prevailing standard of comfort or luxury to be noticed in the early years of school life.

One fact seems clear. Many a small boy, on being removed to a public school, finds that he has to be satisfied with surroundings far less apolaustic than those which he has left. There is not nowadays so great a difference in the style of feeding as formerly. The ideas as to a growing boy's requirements in this respect have increased considerably in 40 years, but for some time the expansion affected the preparatory schools only. By degrees the large boarding schools followed suit, and at last even those organised on the hostel system, where the difficulties to be overcome are naturally greater, have come up into line, so that it may be said that as a rule the boys are fed every whit as well at school as at home. But it is pretty certain that in some other forms of equipment the large schools will never adopt so high a standard as the Preparatory Schools. It is impossible—at least, nearly everywhere—that such perfect arrangements for games can be provided. To take one familiar instance—the cricket pitches in the latter are generally far smoother than in the former, except, of course, the ground on which the school matches are played. The effect is unsatisfactory. New comers at the Public School are discontented with the bumpy grounds, and lose interest in the game. They have been to some extent pampered by the delightful security of the level turf of their younger days, and find it requires some pluck and endurance to face the uncertain rise of the ball on the new cricket grounds. This is a common case where co-operation is needed. The earlier school might aim at being preparatory, not only for the pleasures and studies of the Public School, but also for some of the inevitable deficiencies, if, that is, this particular difference is to be so called. The aim should be in this matter, as in all others, to prevent the younger masters from doing too much. The game should be kept as a game; the boys should be made or encouraged to take part in the care of the ground; and while attention is given to providing a pitch good enough for the learning of the game, the aim should be to teach the little boys never to expect a perfect equipment (except in necessities of life) unless they have had a share themselves in producing it. And even in food it is disastrous if the school-provision is favourably contrasted by the boys with that which they get at home.

Again, in the matter of character-training, there are questions of the utmost gravity and also complexity in which co-operation between the different orders of schools on the one hand and between schools and parents on the other hand, is urgently needed. Take, for instance, the problems which are concerned

with the mastery over appetite. The whole question of feeding and of the light in which boys are brought up to regard food is grievously in need of attention. Greediness and the resulting evils are common among the Preparatory School product. Is this due to indulgence at the first school or to strictness first, followed by indulgence which greater liberty allows? Schoolmasters ought to have their minds clear on such matters as these; but it is not only conference between them that is required, but careful observation and thought. And in this same department lie the vexed and intricate questions concerning the instruction needful for boys at a time of life when the growth of the body is likely to lead to moral difficulties. Public opinion, at least among those who have given most thought to the subject, is verging decidedly in the direction of more outspokenness than has hitherto ever been the practice in England; but no sooner does the position get so far clearer, than it must be asked on whom does this duty fall? On the parent or on the school? And supposing it is the case that the former frequently abdicate this duty, are the preparatory schoolmasters preparing themselves to fulfil it? Abundant evidence might be produced to show that in these departments of life wise and cautious experiments are being made by some individuals, but that by many others the problems are still ignored.

If the questions that have been named are thought to be difficult, there remains one more difficult still. The product not only of Preparatory, but of Public Schools as well, displays the fashionable feeling of coldness and ignorance towards the claims of religion. There is little doubt that a great wave of indifference towards things of the unseen life is passing over Western Europe; and those to whom the fact is fraught with sinister forebodings—and their number is still large—have to consider the immensely important influence which school life from ten to fourteen years must inevitably exercise on the growth of the deepest and most permanent ideas in the mind of a young human being. In no other subject are careful comparison and sympathetic insight more urgently needed.

E. LYTTTELTON.

1. The first part of the document is a list of names and addresses.

THE PREPARATORY SCHOOL PRODUCT.

FROM THE POINT OF VIEW OF A PUBLIC SCHOOL MASTER.

In 1898 a startling letter appeared in the "Times" from an M.D. who had examined several hundreds of boys of 13 and 14, on their entering public schools. His verdict was that 64 per cent. were in a very unsatisfactory condition.

I was glad to be able to show from physical registers, accurately kept by the same Serjeant-Major for 25 years, that boys coming to us now at the ages of 13 and 14 have better average measurements than boys of the same ages had 20 to 25 years ago. And apart from these registers, my personal impression is that they are better specimens. But whatever improvement there is, it is nothing to what might be.

We talk of science. We call ours a scientific age. And yet to apply scientific knowledge to the production of the finest possible human being is, as Mr. Herbert Spencer showed long ago, still a conception rather for the future than for the present. As in many other cases, it would be hazardous to venture on what will, it is to be hoped, be the commonplaces of a future generation, less under the iron heel of custom and prejudice.

It is impossible, however, all at once to revolutionise institutions and modes of life, or to undo the effect of ages of mismanagement. But to come down from the clouds to the solid earth. There is no doubt that the preparatory school product is not what he might easily be made to be, in physical robustness, habits of life, beliefs and ways of thinking, intelligence or knowledge.

Though I have mentioned these things separately, they are, or ought to be, so interwoven as to be inseparable in the education of a child from his earliest years. What is the most important of all kinds of knowledge? Surely that which has to do with life, which tends to make it fuller, healthier, happier. What beliefs is it most essential to impress on a child? Surely that God's laws, when we can be sure about them, are binding, and that the main laws of health are more and more verifiable every day. In what ways of thinking ought we to train a child? Surely in referring everything he does, not to the standard of what is usual, but of what is sensible and right. What sort of intelligence is most telling in the quest of happiness? Surely that which enables him to reason most accurately and most readily about what it is best for him to do in his daily conduct.

All other intelligence, beliefs, and ways of thinking and knowledge are secondary to these; and if we have these ingrained in the child by precept and example, we shall also have excellence in physique and robustness, and rationality in habits of life.

I need not waste time in proving that this ideal is not even aimed at. If it were so, such complaints as those of M.D. would be as ludicrously groundless as if he were to assert that sufficient energy is not devoted to scientific games. But what improvement there is, I believe to be greatly due to the desire to excel in these games. They have caused more time to be spent in regular open-air exercise, the good effects of which have been so obvious, that they have opened the eyes of many schoolmasters to the exceeding sinfulness of depriving a boy of oxygen and a quickened circulation by way of punishment. They have also proved to many parents, who, after many qualms, have sent to school boys whom they have succeeded in making "delicate" by their home treatment, what a mistake all this coddling has been. The younger brothers are somewhat more rationally brought up, and the net result has been the improvement which I have no doubt we have witnessed. And the less foolish management of girls' schools, since Mr. Herbert Spencer made people think about these, is already operating in the same direction.

But the connection between cause and effect in such matters is not sufficiently realised by schoolmasters, still less so by parents, and the "preparatory product," in my experience, has rarely heard anything about it. Irregular verbs, or the mountains of South America, have been more prominent in his education, than the laws of his own being. I rarely meet with a boy who has learned why he should eat slowly, why vegetables or their equivalent should form part of his diet, why he should not eat at random between meals, why he should take a run on a wet day and change immediately afterwards, why he should sleep with his window open, why he can strengthen his throat by keeping it bare, why his breathing organs should have absolutely free play, unincumbered by a tight, or even by any waistcoat, why he should take hard exercise in flannel, and not in any cotton fabrics.

I am aware that I shall raise a smile by the mention of such things, and the smile proves my point. When reason shall have superseded custom as the guide of our lives, the smile will be the other way. But no one who has tried to make boys live rationally and think why they should do this, and not do that, can doubt that if all preparatory schools will do the same, handicapped as they are by the previous upbringing of their boys, and by the holidays, and if these will above all things resolutely fight against the hamper and tuck shop nuisance, no future M.D. will be able to say that they turn out 64 per cent. of their boys in bad condition.

This 64 per cent. (and M.D. cannot be far wrong) is really a very serious matter. I am not going to dilate on the enormous importance for the happiness and prosperity of life, of a bodily condition, not merely free from disease, but robust, buoyant, and

high-spirited. But there is one point of view which will touch those who have no such exalted ideas about high health, but still dread disease. The craze about epidemics, the energy consumed in isolation and disinfection, and the consequent loss of time and disturbance of arrangements, as well as the demoralising panic which is sometimes the result of all this fuss, have come to be serious evils. And it is a case, after all, of Mrs. Partington. You cannot prevent epidemics. Mumps and measles have dispersed their germs before the first signs of indisposition. It was once suggested to me to "isolate" every boy who had, first, slept in the same room with; secondly, sat in Form or Hall next to, any boy who developed measles. I replied that we should also have to isolate every boy on whom he had breathed; and further, that if a boy has not been exposed to measles before he is 15, and afterwards *is* exposed to them—as is certain some time or other—he may be in danger of his life. For measles before 15 is nearly the safest, and after 15 the most serious, of school epidemics. And again, if you have a fair percentage of really robust boys, you cannot isolate scarlet fever, for such boys take it so mildly, that you generally cannot discover it till the skin begins to peel. But this I can certainly say, that with the exception of measles among big boys—not previously exposed to it—the healthy boy, *i.e.*, not one of the 64 per cent., is in no danger from school epidemics, except that he may take one of them in such a mild form as to pass undetected because he has shown no signs of being unwell.

Again, with the tubercle germ, about which we have heard so much. "Boil the milk," say some. Well, the boys won't drink it; but the boy who is not one of the 64 per cent. may drink unboiled milk with impunity. *He will throw off the tubercle germ* as a liner's bow throws off the spray, unless the tubercle germ is present in such quantity as to imply criminal carelessness.

In fact, we ought to turn out the preparatory product pretty well germ proof, as well as accustomed to think rationally, and not conventionally or nervously, about his "health." I only wish there was a word to express that normal and glorious condition of being which ought to be that of the average man and woman. Perhaps in some future century, when the perfection of the human animal is regarded as of equal importance with the perfection of the steam engine, there will be such a word.

So far I have dealt with my subject mainly from a physical point of view; but all life, as I said before, is interwoven. In teaching our "preparatory school product" to act rationally in the concerns of his daily life, and, let us hope, in also setting him a good example ourselves (which I fear not all schoolmasters or parents do), we shall have been training him in a most valuable mental habit.

There have lately been two articles in the "Nineteenth Century," to which we ought to pay very careful heed. One is by Miss Lambert (December, 1898) on "Neglecting our Customers." The other is by Col. H. Elsdale, "Why are our Brains Deteriorating?" (August, 1899). Both, from totally different points of view, attack

radical defects in our whole education. They agree that it tends to cultivate the receptive faculties too much, and the reasoning and creative faculties too little. The boy comes from the preparatory school, knowing a good deal, and knowing it well. I am not depreciating the value of the accurate mastery of detail, but he has rarely been taught to think. In the concerns of his daily life, he has done, without thinking why, what everyone else does. In most of his lessons he has usually had just so much to learn, and so, when he comes from his preparatory school, he has, too often, no visible power of initiative in anything, either in or out of lesson hours. In former days it was not so bad. He had to hammer out his *Cæsar* and *Virgil* without notes, and in dread of pains and penalties. He had to make his verses scan. Now he receives far too much help in *Cæsar* and *Virgil*, because some book has to be got up for examination. The assault on verses, which cultivated resource and ingenuity more than anything which a boy did, has unfortunately succeeded. And really the only work about which he has still to think much is his Latin Prose. For he has to think in order to avoid "howlers," if he is made to work by himself. But Latin Prose is assailed by the informationist Philistines as worthless.

Euclid, to the average preparatory boy, is mainly a matter of memory. In the rare cases in which he can make out geometrical riders, he has so far been taught to think.

But, putting Latin aside, the rest of his education has been almost entirely receptive. This is partly due to the numerous subjects required at examinations. Working for marks almost infallibly induces a cut and dried style of teaching. It is, indeed, difficult in any subject, except translation from and into other languages and mathematical problems, to avoid what is usually called "cram," when the subject is got up for examination purposes.

But "cram," though it undoubtedly fosters some useful qualities, is fatal to the cultivation of independence, curiosity, initiative, and resource.

If I were asked to name one point in which the "preparatory school product" is inferior to boys educated by a really good tutor or governess at home, under the direction of parents who do not care for their boys being "successes" at 13 or 18 years old, but for their success at 25 or 30, I would say that the preparatory school, as a rule, puts the extinguisher on the keenness for knowledge and curiosity about things in general, which is natural to most children.

I am not blaming preparatory schools. Passing examinations and winning "successes" is for them a matter of life and death, and they are powerless against the examination system. If the public schools were to set more store by healthy general development, and less on the powers of receptivity and ability to cram, and if they were not so keen to bribe clever boys into being prematurely forced, in order to gain material with which to win future successes, more rational methods of education, in its widest sense, would be pursued by the preparatory schools. The

great majority of fathers, also, are anxious that their sons should possess a certain amount of definite knowledge, and having no experience in the matters on which they lecture schoolmasters, do not understand that being taught to think is a much more valuable possession. The ordinary father, *e.g.*, will ask his boys for the chief towns of Australia or the ports of China, never reflecting that this sort of knowledge can always be readily acquired in a few minutes by anyone who has any reason for wishing to employ it. But as to the causes of climate and weather, or the beautiful, and to a boy most interesting and elevating mechanism of the solar system, or the distribution of animal and plant life over the globe, no interest is probably displayed at home. In history again, the father will probably ask for the dates of kings and battles, and the examiner will perhaps deal a final blow to any *interest* in history on the part of the boy by asking him about the constitutions of Clarendon. In my boyhood we read and cared for stories about the Persian wars, or Curtius and Regulus, or the Crusades or Armada. Napoleon's marshals were, somehow or other, household words to me. No wonder that the modern boy often hates Scott, because he brings in that "dreadful history," which in the boy's mind is associated with dry text books, impositions, and examinations. I admit that examinations in geography and history are not so noxious as they were, and that examinations in literature and the history of language, which necessarily foster the most hateful sort of cram, are falling into some disrepute.

But all these causes tend to make the preparatory product what we usually find him, with a well-trained and receptive mind, but ashamed of any keenness for intellectual subjects apart from their usefulness in procuring marks or "successes" or in avoiding punishment, averse to reading any books for himself which have the slightest connection with schoolroom subjects, and, unless he is a born naturalist and "collects," with a wet blanket thrown on his natural curiosity about the world in which he lives. We hear a great deal about the athletic mania. Surely we have not far to seek for a cause. But, if any headmaster wishes to lessen keenness about athletics, let him give scholarships for averages, and impositions for missed catches and lost runs, and let him occupy summer afternoons with papers on the history and laws of cricket, or the records of athletic feats.

It was impossible to deal with my subject, viz., "the Preparatory School Product as he should be," without describing him, more or less, as he is. I only wish we could retain the results of the intellectual gymnastics through which he has gone, without making him a victim of the general tendency to put "an increasing discount on originality and independence of thought," which Col. Elsdale so unanswerably exposes and so eloquently deplures. It could be done but for the dead weight of examinations. At present, if a preparatory school were really to try to amuse their boys with history, astronomy, natural history, and kindred subjects, the boys would feel that they were losing so

much time in what is to them the only purpose of school hours, viz., getting marks, places, and removes, with an ultimate view to outside examinations.

If the information subjects could be ruthlessly expelled from outside examinations, except so far as they would come in in essays, and in general papers set more to test intelligence than information, a remedy would have been found. Let the mental gymnastics occupy the morning hours. Let there be real hard work, with its necessary accompaniments of rewards and punishments. Don't expect any enthusiasm for Cæsar or for *narratio obliqua*. Let the master's attitude be: "This is training. It is, I know and feel, irksome, but it is teaching you to think and remember." Let all marks, places, and removes be given for these subjects alone. Indeed, I may say in passing, what is the use of promoting a boy for knowledge of facts to a remove which is beyond him in knowledge of principles, and in power in applying them? A boy who has not mastered the difference between purpose and consequence, and cannot unravel a sentence in Virgil, is hopelessly at sea in the higher remove; and it will not help him if he knows all the chief battles in modern history, or all the seaports of Europe.

So far, I have said nothing about the "preparatory school product's" knowledge of modern languages. It is a subject on which it is necessary to have clear ideas. A language may be learned for three purposes, as a mental gymnastic, for its literature, or for practical utility. Latin is learned chiefly for the first purpose, Greek for the second, and French for the third. Let us confine ourselves at present to Latin and French, as it is with these that the preparatory school product has, or ought to have, most to do, and let us eliminate the literature as a subordinate purpose in each case.

A language also may be learned in two ways; by rational processes and by imitation. These two may, of course, be more or less combined. But, generally, it is true that a language learned as a mental gymnastic ought chiefly to be learned by rational processes, and a language learned for practical utility, by imitation. It is also true that an inflected language is far the most suitable as a mental gymnastic. As no one has more conclusively pointed out than Mr. Goschen (*Essays and Addresses*), about five times as many mental processes have to be gone through in translating Latin as in translating French. Again, we do not want to be able to talk Latin fluently, but it is a main object of learning French to be able to use it readily in conversation. Therefore, French ought to be learned chiefly by imitation. The difficulty about this is that the natural way of learning a language requires natural conditions, viz., that it should be the only language used for several hours per diem. But again, as learning by imitation is in no sense education, the time cannot be spared for this, if we are to teach our boys what Mr. Goschen so aptly calls "the art of interpretation."

Here is where the average parent puts down his heavy foot. "Latin is no use to my boy; French is." He might as well say:

"Gymnastics are no use to my boy; shooting is." He doesn't understand and he doesn't try. For he has this reason on his side. The "preparatory school product" will afterwards (probably) require to be able to speak and write French on the level of ordinary life, and he ought to learn it early and well.

My own solution of the difficulty is a compromise.

Let French be taught before Latin up to the age of, say, 12 or 13, mainly by imitation, but partly also by grammar and exercise. But let it always be borne in mind that imitation is not only not an educative process, but that it promotes the very tendency, which, as I showed at the outset, is already too predominant, and which is most antagonistic to habits of rational thought and independent judgment.

The young boy, however, will have some interest in this work, and he will not be damped by hearing at home that "Latin is no use to you." He will also by the far easier grammar and exercises, and by the general absence of inflections, and of the inverted order which they occasion, be trained and prepared for the greater difficulties of his Latin. Afterwards, I believe, when he begins Latin he should drop the grammar and exercise part of his French, at least for a time. And here I may say that abstract reasoning, like that of Euclid, is still less fit than Latin for a young boy's mind. I believe, as a rule, that it is a sheer waste of time to begin Euclid till a boy can unravel Virgil.

I would like then to receive the "preparatory school product" at 14, able to talk a little French fluently, to write easy French exercises correctly, and to be able to apply the ordinary rules of syntax, and unravel fairly easy sentences in Latin. He should also be a fairly good arithmetician up to a certain point, and have become acquainted with a number of elementary geometrical facts, not by abstract reasoning, but by actual mensuration verified by himself. He should also write a large, bold hand, and spell fairly well. He ought also to have a large stock of general information, *not* acquired as a hateful task, but in such a way as to interest him, and to make him eager to acquire more, in directions suitable to his individual character and opportunities.

But in the war which he has to wage against the Philistines, this is the position which a schoolmaster must hold to the death. He has a hard battle to fight. Quick writes very truly (*Life and Remains*, p. 257), "We are haunted by an incessant clamour for positive knowledge. The parents, when they suddenly wake up to an interest in their children's progress at school, try to test it by such questions as 'What is the capital of Brazil?' or 'What was the name of Henry the VIII.'s last wife?'" And his conclusion is indisputable. "Such things as history, geography, English literature, should be taken in school and elsewhere as unprepared subjects, the teacher seeking to interest the pupils, and not troubling himself about any test of result."

We shall be on the high-road to have the "preparatory school product" more as he ought to be, when parents as well as public school authorities come to care more for what he is than for what he knows; for his powers of intelligence and reasoning,

rather than for a packed portmanteau of information; for health, activity and high spirits, rather than for the strokes he has learned at cricket. Let them estimate the influence of his school life by the openness of the boy's countenance, the frankness of his manner, the courtesy, kindliness and honesty of his conduct, by the clearness of his complexion and the good development of his chest and arms; by his fertility in resource; by the books and parts of a newspaper which he reads; and by the subjects on which he cares to talk. Let games by all means be prominent among such subjects. Talk about games is a great safeguard to English boys. "What do French boys talk about?" said Dr. Wilson of Clifton. But I am convinced that for most of what is overdone and unwholesome in the "athletic mania," the schools and the examination systems which hamper them are to blame. History, literature (with notes), natural history, earth knowledge, have all been associated with dull text books, preparation, impositions, detentions, and, as if to make the contrast between "work" and "athletics" more complete, schools now let their boys live through the play hours in the glorious liberty of flannels, while the "preparatory school product" has usually, for the immediately succeeding school hours, to induct himself into starch and coats, and even waistcoats, at a temperature perhaps of 80 degrees. Let us put all these things together, and cease to wonder that he has not usually fallen in love with matters intellectual.

But I do not despair of much more satisfactory results in the near future, as there are signs, here and there, of reason getting the better of prejudice and custom in the concerns of our daily life. This I am convinced is the next stage in the progress of civilisation.

HELY HUTCHINSON ALMOND.

THE PREPARATORY SCHOOL PRODUCT.

FROM THE POINT OF VIEW OF A PUBLIC SCHOOL MASTER.

It is an unquestionable fact that in the last twenty-five years a most extraordinary change has passed over the face of education; some fifty years ago schools were treated as a necessary part of life, but like other homely and useful institutions, such as housemaids' cupboards or kitchen middens, were as far as possible banished both from sight and mind. Now the tendency is rather the other way, and boys at school may be held, not unreasonably, to suffer from the obvious and excessive attention devoted to the development of their aims and ambitions; there is a danger of our educators, in aiming at sympathy, condescending too much, and looking at things too much from the boys' standard. However that may be, the *change* is undeniable, and it is equally incontestable that the preparatory schools have had much to do with effecting the change.

This short paper will be an attempt to criticise, from the point of view of a public school master, the results achieved, and to estimate the benefits that have accrued; but it would be ungenerous—indeed, from the scientific point of view it would be inaccurate—not to begin by fully recognising the enormous debt which education generally, and the public schools in particular, owe to the improvement in the preparatory school system. Whether or no this progress is to a certain extent superficial, whether the development on certain lines is not possibly excessive, whether the methods employed are not, in the mechanical uniformity to which they tend, prejudicial to the characteristics of originality and force, has been doubted, and these suggestions will be briefly examined; but, on the broadest grounds, there is no sort of doubt that the public school master's path is smoothed for him to an extent which the present generation of masters hardly recognises, and mainly by the action of the preparatory schools. In the first place, the disciplinary difficulties which used to be held to be an inseparable part of public school life have been enormously diminished, and, in the second place, the whole relation of boys and masters has been put on a different footing; indeed, it may shortly be said that the old tendency among boys to regard the schoolmaster as a *natural enemy* has disappeared; possibly the public school master has got to exert himself before he is considered the guide, philosopher, and friend of the budding youth; but boys

now come to a public school with an instinctive feeling of friendliness to a master, which is the outcome of the patience, indulgence, and sympathy with which they have been treated at preparatory schools; and the same thing has eradicated from the minds of most boys to a considerable extent, though not beyond the possibility of recall, the former feeling that a master was *fair game*, and that any small humiliation or annoyance which could be inflicted upon him was of the nature of a priceless and rewarding jest, and amply worth the risk of penal consequences.

The question is, how have these improvements been effected? First of all, we venture to believe, by the decrease in the size of preparatory schools. There were, of course, in former days, a certain number of schools where only a few boys were prepared, and where parents paid at an advanced rate for comforts which would be considered inadequate now in all the better class of preparatory schools; but the majority of the schools that prepared for public schools were big places and rough in proportion: possibly it was as well that they were so, for the small domestic sheltered school was but an inadequate preface for the rough and tumble that was to ensue. At many of these schools there were over a hundred boys. The food was rough and not particularly plentiful; corporal punishment was liberally distributed; boys were crowded together, for meals, work, and sleeping, into spaces that would not be tolerated now—the smaller boys often slept two in a bed; the sanitary arrangements and the arrangements for illness were of the most elementary kind; there was a good deal of fighting and bullying; but the life was probably a fairly healthy one on the whole, and tended to produce a cheerful and manly type. It was the sensitive, the undeveloped, the fragile who went to the wall. It is at the same time only fair to add that the above statement needs some qualification, and that there still exist certain notable preparatory schools, where a large number of boys are received, which are well to the front in all modern improvements; but in these cases success is invariably due to the conspicuous personality and statesmanlike qualities of the headmasters of the particular schools in question. It may be assumed as a general axiom that the numbers of a preparatory school should not be too large for every boy to come under the personal observation and influence of the headmaster of the school.

The next point to be considered is the extraordinary improvement in the status, social position, and refinement of the assistant masters in preparatory schools. There was, fifty years ago, a distinct brand of social inferiority upon the schoolmaster, which has by no means entirely left him. The title of "usher" would even now never be used, except with an intention to annoy. The assistant masters of preparatory schools fifty years ago were too often underpaid, unrefined, unimaginative men, the kind of gentlemen whom their headmasters would be careful to describe as "perfect," with no particular interest in their work—good-natured, perhaps, by instinct, but with no motive for curbing irritability, and if not deliberately cruel, yet affected in some

measure by the fatal tendency of that instinct to grow upon anyone who carelessly indulges it, and at least believing that severity was the only form of dealing effectively with the tiresome human animal in its earlier stages. Probably the common-room life of such masters was of the most unedifying kind, the life was the frankest drudgery, and there was little inducement to mental refinement or pedagogic interest.

This state of things is almost entirely swept away. There is now a much more general instinct among members of the educated classes for employment of some kind. The young University man who hangs about at home is less common than he was; there is infinitely more competition for positions of even inferior emolument. The number of men who would in old days have inevitably taken Orders tends to decrease; men who are not rich enough to go into the Army or to the Bar, who have no professional or commercial interest, inevitably gravitate to the profession of teaching. The profession produces an adequate if not large subsistence; it has a human interest; it prolongs the tastes and thoughts of boyhood. The result of this is that the assistants at preparatory schools—and, indeed, increasingly at public schools—are now men of a healthy type, with no particular intellectual interests, not as a rule characterised by any particular ambition, but kindly, sensible men, conscientious in their professional work, of decorous if not religious thought, and without extravagance or sentimentality. The only problem connected with the profession is: What is the future of so many of these preparatory schoolmasters to be? While they are young, good-humoured, hopeful, they are probably well adapted to their work; but when nerves and muscles begin to fail, there is nothing but devotion to carry a man on. And their lives are lonely, except for the man who is by instinct a "nursing father," for their emoluments forbid matrimony, and the only chance of promotion is to start a school of their own; and for this a certain amount either of capital or of conspicuous social tact is necessary.

We pass to another point—the question of teaching. Here we find, in the majority of instances, that the work of preparatory schools is well done; there are well-known exceptions, familiar to every public school master, but as a rule boys are admirably grounded, write neatly, and are not afraid of work. These results seem to be achieved in various ways. A good deal of severity, even of incidental corporal punishment, seems still to be the rule at some preparatory schools; but the fact that boys come equally well grounded and equally content to work from schools where corporal punishment is practically non-existent should prove, if proof were needed, that such a system is out of date, and that boys can be trained without such punishment, though there may be some few cases where it is advisable, and the possibility of it is a useful force in the background.

It is not my impression that the teaching of preparatory schools is usually of a stimulating order; it is quite certain that younger boys, up to the age of fifteen or thereabouts, take an

interest in the conscientious performance of work which the growing years gradually subtract; but I do not find that there is much attempt made to excite the intellectual interest in preparatory schools, though, again, there are certain exceptions; and the introduction of a general paper in the entrance examinations of public schools has led to some improvement in this respect. I do not believe it to be an exaggeration to say that the majority of preparatory schoolmasters, if they frankly uttered their mind, would probably say that they did not consider the training of the reasoning faculties was any part of their business; that their duty was to turn out a boy capable, at a certain age, of reaching a certain standard in prescribed subjects. If that view is accepted, it must be confessed that they do their work extremely well.

As to our next point, which shall be health, there can be no sort of question that it is very carefully considered at preparatory schools, and with satisfactory results; the improvement in this respect has, within the last thirty years, brought school life, with all its healthy incidents, within the reach of delicate boys who would, in earlier and rougher days, have been condemned to private tutors and home education. Health seems to be considered, at the preparatory school, from an eminently common-sense point of view. The boys are sensibly clothed, the rooms are well warmed, food is liberally administered, attention is paid to changing and bathing; there can be few of the ill-fed, dirty, neglected-looking boys that existed in most of the large preparatory schools of fifty years ago. There seems, too, to be little of the faddist abroad, though in the competition for pupils in the presence of maternal over-anxiety, rumours of extravagant hygiene reach the ear from time to time; quite recently a colleague of my own was told by a mother, with serious approval, of a visit that she had made to a preparatory school, where the head-master had taken her into a hot room and showed her a number of pigeon-holes where the boys' clothes for out-of-door purposes were kept, so that they might always be slightly higher in temperature than the average temperature of the body. This is indeed tempering the winds of heaven. But as a rule a more moderate standard prevails.

We must pass on to the consideration of an important subject—the question of games. No one can be more keenly alive than the present writer to the possibilities of healthy enjoyment and the beneficial results both to health and morals to be derived from regular and organised games; and nothing is further from his wish than to pose as an anti-athletic prophet. But anyone who considers the present education of the youth of this country in a serious spirit, or who has at all a high ideal in the matter of intellectual progress, cannot fail to be alarmed at the part which athletics play in the life of schools. To say that success in athletics is the thing which the majority of boys and parents desire above all others is incontestably true. The candid statement of a parent of a public schoolboy of the sufferings he undergoes when his boy is a possible candidate for the school eleven,

and the outspoken eagerness with which such a distinction is desired, is possibly qualified both in speech and thought by a predominant desire that the boy should be morally stainless, though such a desire as the latter is more in the stable background than the active foreground of thought. But it is rare indeed to find any parent whose avowed preference would be for intellectual distinction in his boy. Such a position is now hardly ever simulated between parents and tutors. Athletic distinction in school life holds the place that monetary success holds in real life. They are the two things that the majority of persons consider frankly to be essential. The preparatory schools have not unnaturally taken the cue from their superiors, and boys arrive at a public school ready to fall in with the extravagant view of athletic distinction that exists. Indeed, athletic promise is often insisted upon as a reason for a public school master to make a special exception in favour of admitting a boy to his house who has not been previously entered; and it is certain that if a preparatory school master can point to distinct athletic excellence in the case of a boy, it is more likely than intellectual promise to gain a footing for him in a fashionable house in a large public school. The unhappy part of the business is that at public schools the same ambition affects even those boys who, for physical reasons, can never hope to excel in athletics, and a still more unhappy feature is the desire not so much of athletic prowess, or the enjoyment to be found in the successful practice of athletic skill, as the hankering after the badges of athleticism and the social success that it brings. What one misses is the independence of the old system, when a boy might to a certain extent follow his own tastes; but now to do this means a singular independence of character. It means almost inevitably taking up the position of a failure, a loafer, a tainted wether. Masters, indeed, fall easily enough into the same error, and it is generally urged by them that there is some direct connection between morality and athletics. Such is not my experience, and I am quite sure that the hero-worship which surrounds a very successful athlete is in itself a grave danger, if he is prone to sensual faults. The preparatory schools are in this matter somewhat to blame; their arrangements with regard to professionals, cricket pitches, coaching by masters, is apt to destroy even athletic independence. Boys going to public schools are discouraged by the absence of the watchful care that surrounded every stroke and every ball in earlier stages, grumble at the less well-watered pitches of a public school, and droop into athletic despondency. We hear, and it is not all fable, of boys at preparatory schools who have their right foot pegged to the ground, and are bowled at by a young and active master that they may learn to stand up to bowling—even of schools where boys are sent straight from the nets to bed because of a careless stroke. But possibly the tendency is irresistible. What is regrettable is that intellectual honours should have sunk so far into the background, and should be held hardly worthy of recognition, still less of respect.

To pass to more serious ground still. It would have been stated fifty years ago that a certain amount of cruelty and rough usage of smaller boys was practically inseparable from the public school system, and yet silently and secretly the tone has been changed. Bullying seems to be now not only not fashionable, but hardly amusing. No doubt boys are not in any way angelic; they have little toleration for weakness, and with all their excessive sensitiveness to criticism and public opinion, they are lavish of slander and quick to convert the breath of rumour into the voice of solid fact. But the deliberate infliction of cruelty as a species of amusement seems to have gone out, and with it has died one of the great reproaches of our public school system. This is due in the first instance to the homes, and secondly to the preparatory schools. The old-fashioned idea of discipline, the excessive recurrence to the harsh Solomonic maxim, the theory that repression and pain, inflicted during the most sensitive years, were *per se* good, has gone. A boy goes from an affectionate home to a preparatory school, and finds there that human relations still exist: he is more or less one of a family; the masters are paternally interested, the boys fraternally generous. Year after year this tide has slowly been setting towards public schools; whether it has greatly modified the feelings of young boys with regard to school life may be doubted. But, after all, the chief part of pain is in the anticipation of it, and though the anticipations are now happily falsified, it will take time to relieve the childish mind from the apprehensions which still sometimes beset it on its first entry into public school life. I myself, as a little atom, the first night of my sojourn at a carefully conducted preparatory school, was struck, while miserably crouching in my bed, by a shoe deftly thrown from a cubicle facing my own, which deprived me of breath. This particular greeting was never repeated; but I am ashamed to say for how many weeks the entreaty that it might not happen formed the staple of my evening prayer.

And this brings me to a further and more important point. How is the *morale* of boys affected by the preparatory school system? No unprejudiced person could doubt. In the place of the sturdy neglect which characterised English schools half a century ago the boys are now surrounded by unobtrusive vigilance. There is none of the herding of boys together, unwatched except by some weary and sickened usher; the masters at the best preparatory schools now live with the boys on an amicable footing, like authoritative elder brothers or despotic uncles. The old system, perhaps, produced some manliness of character in a few, but it had no merits for the many. Much good material was spoilt or broken in the making. It is true that the few are now somewhat sacrificed to the many; but that comes from a more sensitive feeling, among educators, of responsibility to the average unit instead of to the exceptionally gifted. It is, indeed, not common to find a boy fresh from a preparatory school who is absolutely innocent of the knowledge of the existence of moral evil, though such a thing is possible but the boys come, as a

rule, with pure and good instincts, and without any experience of grosser evils. It has been suggested that the practical disappearance of cruelty from public schools is responsible for the increase of less healthy sentiment. But my own experience points decisively to a marked decrease in moral evil. That evil exists, that coarseness exists, is indisputable; but I am strongly of opinion that it is more confined than formerly to small knots of boys, and that the general tone is infinitely manlier and purer. I look forward confidently to the time when evil of this kind, so far as is consistent with human temptations, will have been practically eliminated, like boyish cruelty, from the list of necessary evils of school life.

At one great public school within the last decade the evil has been reduced to a minimum. And the preparatory school-masters are, after parents, the great source of strength in the matter. If a boy starts his school life under healthy auspices and begins by finding school life not necessarily low and coarse in tone, and his experiences, both in conversation and action, not necessarily of a kind which should be kept from his home circle, he starts *omine cum bono*; and it is not an unreasonable hope that *hoc fonte derivata* a thoroughly clean and healthy tone is streaming into our public schools.

Lastly, as to the definite religious training given to boys at preparatory schools, it seems to be sound, Biblical, and unsectarian. Boys come to public schools with something more than respect for religion; religious practices appear to be, in many cases, if not the vehicle of a vital emotion, at least a sacred duty. It is encouraging to find how many boys have a Bible at their bedside to be read before they go to sleep, placed there as the natural companion of that quiet hour; and, however much contempt boys might manifest in the case of a companion who ostentatiously practised a Puritanical standard of conduct in daily life, any interference with a boy on the ground of a strict adherence to religious forms is a thing unheard of. The epithet "pious," as I have frequently had to point out to boys in translating the *Aeneid*, is not on their lips a compliment; but the persecution or disapproval, such as is recorded in books like *Tom Brown*, attending on the public performance of a religious duty, is now out of date. Boys have an immense respect for custom, which is a fact full of hope for the educational idealist. Mr. Gladstone used to tell an amusing story of a contemporary of his own at Eton, who, arriving as a new boy, after the beginning of the half, and seeing the boys going into chapel on Saturday afternoon, went in with them carrying a Prayer-book. It was not the custom for boys to use Prayer-books, however, on secular days; so he was called "Methodist." The next day being a Sunday, the boy determined to bow in the House of Rimmon, and so went in without a Prayer-book; but it was the custom for boys to use Prayer-books on Sunday, and he was therefore called "Atheist" for being without one.

Such a tendency is hopeful, not because it is rational, but because if a useful practice, a definite tone of feeling, can be

introduced, it is apt to be stereotyped. The tendency has of course its dangers, as an unsatisfactory tone has an equal chance of becoming fixed; but as we believe that most of the unsatisfactory tendencies of school life are the inheritance of old neglect, there is hope for the educational reformer.

Whether the religion of practical life is sufficiently inculcated in preparatory schools—or indeed in any schools—is hard to say; it is melancholy to think how completely severed in many boys' minds practical conduct and religious ceremonial are; the connection is in itself a subtle one; it takes a practised Christian to assign to every clause of the Apostles' Creed its practical effect in moulding character; and in England, if we are assured of the merits of a system, such as our system of religious worship, we are apt to place it at once among the indisputable benefits of life, without taking the trouble to explain to those whose heritage it is the way in which it was intended to influence character. We are far too easily content; if the custom itself is punctually complied with, we are not apt to unravel its ultimate effect on the development of character.

A great teacher, lately dead, in reviewing his experience as a schoolmaster, said that the first thing he would do differently, if he had to begin over again, would be that he would speak much more directly and individually to the boys on spiritual things. The reticence from which he had suffered is a peculiarly English characteristic; and it is the unhappy fortune of many minds that, if this reticence is once overcome, the facile communication of platitudes becomes an inexpressible delight and an overpowering habit. I recollect finding that there was nothing in the whole of his preparatory school life which a former pupil of my own recollected with more shuddering dislike than the "straight talks" delivered at the weekly services on Sundays in his private school Chapel by his late headmaster. This excellent man, to avoid formality, had accustomed himself to strolling about the Chapel, in canonicals, talking at random on spiritual things, and rapping out inconsequent questions to the boys. "Boys, I hit from the shoulder," he is reported to have said in one of these infelicitous addresses;—"I run my sword in up to the hilt . . . and . . . I expect an equally sensible reply." No doubt he obtained his wish.

The fact is that in the matter of religious teaching, as in the case of all other teaching, we are confronted with the great educational maxim that the system is almost nothing—the personal factor almost everything. Given a man of refined and imaginative mind, with striking presence and magnetic voice, and the boys would listen willingly and remember gratefully; but to get shrewd, spiritual instruction from men who are neither shrewd nor spiritual is an impossibility. To the ordinary wholesome, athletic type of preparatory schoolmaster—a type which, we venture to believe, is becoming normal—with no particular religious difficulties, no conflict with rebellious tendencies, to speak freely and directly of religious things to pupils, would

be an intolerable *gêne*—indeed it would be impossible, even if it were desirable.

To sum up very briefly, it is our belief that preparatory school education, basing its reform upon the increased interest in and intimacy with children customary in English homes, has done a great work in the right direction. On the merits of the system we have already insisted; the qualities employed are sense, vigilance, consideration, care, and sympathy. The results are humanity, health, moral and physical, happiness, and industry. The dangers of the system are twofold. The first is the over-pampering of boys by endeavouring to screw the domestic arrangement of schools, in return for high fees cheerfully paid, to exactly the same level as home arrangements; whereas given clean linen and wholesome plenty, it is bracing to have something of the barrack, something of Spartan simplicity in the life of a school. The second is the dominant position which athletics tend to occupy in education, as the thing most keenly cared for, and almost the only thing talked about between boys, masters, and parents. If the intellectual ideal of education is doomed, it will go, but at present there are few, if any, educationalists who would frankly and publicly confess that they attach no importance whatever to the intellectual side of education. The Bœotians study bodily vigour, said Cornelius Nepos, more than mental acumen; over the *vile corpus* of the schoolboy a battle is being waged; many parents and many schoolmasters are at heart Bœotians; meanwhile it is the duty of all schoolmasters who believe in the intellectual side steadfastly to uphold it. If they will not prophesy, who will? Even if they cannot carry the day, let it at least be said that among them "*Justitia, excedens terris, vestigia ponit.*"

ARTHUR C. BENSON.

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THE HOME TRAINING OF CHILDREN.

A GREAT change has come over modern thought with regard to the early training and teaching of children. The parent is beginning to assert a position in the educational scheme, and Home Education is becoming a recognised science. The pendulum, which is for ever swinging in educational thought, as in other fields, is perhaps settling down at what one hopes is a sane and true point. The distance covered within the last twenty years has been a very wide one. Thought, as regards home training, has travelled from the point where children were taught of set purpose the three R's, at about three, four, or five years of age, to the point where they were to learn nothing but what could be presented to them in the way of play, and "must" and "ought" were banished from the schoolroom. Nor is this a thing of the past. "I met a governess," to quote from a letter, "the other day who was complaining that her small pupil of five was getting dull over lessons, and it turns out that this poor mite has been doing lessons ever since she was three, and reads now and does dictation!"

The exaggerated form of the first position is seen in the early teaching of John Stuart Mill, whose mental food was a pabulum of facts, and who himself deplored the consequent distaste for knowledge and absence of nourishment for his growing imagination.

The extremists in the second line of thought, following Rousseau, would let the children run wild up to eight or nine, and simply pick up what they can during the process. Definite training of any kind is abandoned and nature is to rule supreme. Truth seems to lie between these two points, but there may be various methods of reaching her, and of these I would speak at length, first treating the matter generally, and then taking each separate subject by itself.

The home has many functions to perform, and among others, indirectly, if not directly, it is the child's first school. Hence a definite purpose must lie before the home trainer, and that broadly speaking is so to prepare the child for the preparatory school, that he may be in a position to profit most by the teaching in this school, and that the greatest economy in time and force may be effected. How can this result best be attained? The child is born with a certain disposition with certain tendencies, some are common to all normal children, others are his by right of inheritance. Such disposition it is for the trainer to mould into the true and noble character.*

* See "Home Education" by C. M. Mason, Chapters III. and IV.

Right habits of mind are to be inculcated and living ideas are to be presented, on which the child's brain may grow, and become strengthened and nourished. I do not believe that one should set oneself to train each faculty of the child separately, but, looking on the mind as a whole, give it food and opportunity for exercise in every direction.

In the first year of a child's life its *environment* will furnish it with ideas and brain nourishment, but even in these early days the work of the educationist begins. We can secure for the child the best conditions for rest and growth, absolute quiet and darkness during sleeping hours, absence of fuss, noise, or excitement during waking hours. These prepare the soil for future work, and perhaps it is difficult to estimate how much pain and trouble and nervous disorder may be due to early mistakes, in these directions. Moreover, definite training in habits of obedience and attention, those two absolute essentials in a child's mental outfit, must be commenced at the very beginning of things, and before the child is two they will be gained for ever. This is not the place to dwell on those other nursery habits, which, every mother recognises, have to be formed in these early months.

Probably the only *direct* means of adding to the "building of the child's mind house" is through the medium of the ear. Here I think that the ordinary singing of nursery rhymes may with advantage be supplemented by allowing the child to hear daily pianoforte compositions of recognised musical worth. If this be continued regularly and conscientiously even the non-musical child may develop an appreciation of, and delight in, good music which will greatly increase his "enthusiasm for art." The musical child, on the other hand, will approach his first lessons on an instrument, with a joy, gained from an intimate knowledge, of the best, this art will hold in store for him.

It is for the parent to see, that, above everything, the child's natural disposition towards the acquiring of knowledge, and his innate curiosity to understand everything, be not in any way lost as the years go on. Without allowing a ceaseless and oft-times unthinking fire of why? and wherefore? the parent may by wise guidance make this natural curiosity the most powerful lever when school work begins. It is because we are apt to overlook this absolutely natural love of knowledge, that we feel it necessary in the early days of lessons to wrap up the pill in the gilt of games and nonsense stories, and in later years to have recourse to the stimulus of marks and prizes. If we can from the very first, trust to the interest in the subject itself as a stimulus to the acquiring of knowledge, and form habits of industry, dutiful application, etc., as a means towards that end, we shall probably find outward goads unnecessary.

It will be best to take the years from two up to six or seven together, in dealing with the mental training of children, as it is almost impossible to say, when a child is ready for receiving certain ideas. Given the principles, it is not difficult to apply them to each case. Probably the most fundamental principle, and, even in this age of child worship, the most neglected, is

respect for the children. A respect which will forbid our neglecting their environment, and which will forbid our giving them anything, but what is really good and true, both as regards the people, as well as the things, which surround them. We know that the little child *does* notice, *does* see and *does* hear, and we are careful that our respect for his powers in these directions shall act as a safeguard. We put the child in an atmosphere of love and refinement, and above all we see that as far as possible he is not cheated of his right to *Nature* as a nurse. A country field, and hedge, will give a child most of the mental food, which his mind requires, and will give opportunity for exercising his powers of observation, etc. A wise educationist will let the child find out most for himself in his nature lessons, and will leave him free and alone with his teacher, whilst now and then throwing in an answer to his many questions, and directing a little, but a very little. Here we can form the habits of accuracy, truthfulness and intellectual honesty, by making the child absolutely clear as to what he has found out for himself, what he has been told to look for, and what has been definitely imparted to him. This is the time to give the children a nodding acquaintance with all the flowers, trees and birds, and when the desire for knowing the names is strong to let natural objects become familiar friends, by telling the children their simple English names. The love of collecting is very great in childhood, and a little guidance here and there will add zest and joy to many a country ramble. The habit of "sight seeing" ("Home Education," Chap. II.) can be formed in the long days spent out of doors, and thus much pleasure given to the children in after life.

Verbal accuracy and power of narration as well as the power of imagining may be much nourished in these early years. Story-telling is always a delight with children, and I believe that we should, from the beginning, give them a knowledge of true literature. Long before a child can read he will know and love good poetry and good prose. We need not neglect nursery rhymes and such familiar nursery Classics as "Alice in Wonderland" and "Robinson Crusoe" (God forbid that we should), because the little ones extend their range of favourites and learn to love Malory's "Morte d'Arthur" and Tennyson's poems. I believe so strongly in the educational value of reading aloud to children, that I wish it were more generally recognised. The habit of attention is perhaps almost the very best equipment, with which a child can start his schooldays, and probably no means of forming this is so absolutely efficacious as in letting the children learn to be good listeners. If they are encouraged to relate, what they have heard, their powers of narration will be strengthened, and gradually they will reconstruct the ideas received and will tell stories, the apparent originality and beautiful imagination of which will surprise the heavier adult mind. Malory's "Morte d'Arthur," portions of Froissart and other chronicles, "Gulliver's Travels," well arranged stories from the classical writers, and from Chaucer, and Spenser, the old favourite fairy tales—these are but examples of the literary treasures we may offer our children.

Provided that they are good, and full of action and "go," the children will delight in them. They tell of the childhood of the world, and the child feels akin to them and rejoices in them, far more, than in the books, which treat of children, whose lives are very much like his own. If we want to counteract slipshod style and bad taste in reading, writing, and speaking, we shall not lightly abandon this custom of reading aloud to children, even when they are grown boys and girls. We can also greatly stimulate the children's power of narration (and we know how great this is both in the childhood of the race and of the man), by letting them describe what they have seen in those hours, when nature has been their chief teacher. Here I would urge that to my mind the potent cause for the loss of this graphic use of words, which delights us, when the child is under seven or eight, and which seems gradually to disappear, is to be found in the fact, that the child is too early made to write his own little stories, his letters, or his nature diary. Hampered by his inability to write well and quickly the child's flow of language and power of word painting goes. I would advocate that the child, even in his later schooldays should be encouraged to narrate instead of write his compositions, the substance of his history lessons, etc. The habit of this *vivâ voce* reproduction would also stand him in good stead in after life, when the power of expression is becoming more and more necessary.

Early training in the exact use of words, in an accurate answer to the question put, is one means by which the "unconscious preparation of a child's mind for science" can be effected. The child can from the first be made to do and say things in a scientific manner, and thus we can counteract a tendency to exaggeration and untruth, unfortunately all too prevalent in adult society. The slipshod mode of thought, which goes for *opinion* is due to general untidiness of brain and muddle-headedness, and any early training which would result in more scientific habits of mind, should be earnestly carried out.*

We all believe now in early hand and eye training, we give the children paint-brushes and colour and chalk, and help them to express themselves in various directions. We teach them basket-making, chair-caning, sewing and knitting, clay modelling, and, later on, *Slojd* (cardboard and wood), wood carving and bent iron work. We do this because we believe in their educational value, but I would not hurry these occupations, and certainly not let them encroach on the children's leisure hours; much training in deftness of finger and hand can be gained incidentally in arranging specimens, collected on walks and even in putting away toys. A foundation for science teaching may be laid, it has been wisely suggested, by accustoming the children to handle pencil, ruler and compass, and in thus unconsciously evolving geometrical shapes. A word as to toys: most parents are alive to the futility of furnishing the children with so-called educational toys and games. Stones, paper, bricks and balls are within the reach of all children alike, and we shall find that the innate love

* See Mrs. Boole's Articles in "Parents' Review," 1899 and 1900.

for these will last when expensive toys are discarded and broken. But while we deprecate what are termed educational toys, we may with advantage make use of geometrical forms for bricks, etc., and thus unconsciously the brain becomes familiar with what, when science lessons begin, are otherwise mere abstractions.

And now let us take our child of six and a-half or seven when he should first enter the home schoolroom and begin his real lessons. What does he know and what can he do? He should, we believe, be an interesting, and interested little pupil. His will is trained to ready, cheerful obedience, he has the habits of attention, of quick bright observation, of accurate description, of neatness and of promptitude. He is eager to learn, lessons have no terrors for him, he wants to know and he is not afraid of work. He has an intimate and loving every-day acquaintance with the names and habits of the flowers, birds, and insects around him. His ear, hand, and eye have had definite training. In fact, the ground has been prepared for good teaching, and he has been put in the right attitude towards the good teacher. Can he read and write? Not always. I do not advocate definite instruction of any kind other than what I have sketched out, before the child is six and a-half. Many children will have "taught themselves to read," *i.e.*, picked it up almost without our knowing it before that age. Other children, with the ground well prepared, will learn it very quickly, stimulated by the desire to read for themselves the many books, they have learnt to love. Writing has probably gone hand in hand with drawing in the earlier years, and in all probability dexterity has been reached in this also.

Now, as regards the attitude of the good teacher; I should put as the first principle underlying all good teaching the *belief in the child's desire to know and learn*, and in the fact that the interest in the subject is so great, and the idea underlying each subject so vivifying, that hardly any other spur is necessary than putting the child face to face with it. Let the lessons be short and brisk and bright. Let the teacher be fired with enthusiasm and be interested in them himself, let him be sure that each day a definite step is gained, that there is no going back, that a fresh idea is added to the old ones, and that the habits of good work are strengthened. Let the teacher be the interpreter of knowledge to the child, not the mediator between it and him.

A word as to subjects chosen. It is a truism to say that it is not the subjects taught, but *how* they are taught, that is important, but still I believe we should have a very wide curriculum for the younger children. Though specialisation for boys, destined for public schools must commence earlier than for girls, most modern efforts in postponing this specialisation have, I think, been marked by success. We want to give the children open doors through which they may afterwards wander into the realms of knowledge according to their own special needs. Moreover, too exclusive a mental diet does not tend towards mental development. I do not believe that with good methods of

teaching and shorter lessons than are generally given, a wider curriculum need tend towards superficiality and want of thoroughness. A judicious co-ordination of lessons, shorter hours, and a careful arrangement of the time-table does, on the contrary, yield, I feel sure, the best results.

The following sketch of work for children from $6\frac{1}{2}$ —10 is mainly taken from the programme of work and time-tables, arranged by Miss Mason for the children, working in their home schoolrooms in connection with the "Parents' Review School."

CLASS 1A. Children averaging from $6\frac{1}{2}$ to $7\frac{1}{2}$.

Bible lessons taught as far as possible from the Bible direct, with explanatory description of the countries and people dealt with, gained in the teacher's own reading.

Recitations.—Poems from the Children's Garland of the Best Poets, Hymns and Psalm. Children to be encouraged to listen to the poems, etc., when read aloud.

Number.—On the Sonnenschein and Nesbitt method. The apparently slow progress with "rules," etc., does not mean that the child will not be equal to his school-fellows when he goes to a preparatory school. On the contrary, this method of teaching "pays in every way."

Singing.—French and English songs.

Drill.—Swedish and Ball drill.

Writing.—Child to master one letter a day and not go back. Perfect execution and cleanliness to be aimed at.

Reading.—Child to be taught on the Look and Say method and from an easy book straight away. "Readers" composed of words of one syllable are not interesting. The child can simultaneously with reading make up words with loose letters, and copy them so that spelling, dictation and reading can go hand in hand. Here again the progress is not apparently rapid, but the interest is maintained. A child, working with others, is taught from the very first how to "study," and as he finds his power of reading grows he begins to read for himself, and is not afraid of tackling a real book. This method is doubtless the one used unconsciously by a child, when he teaches himself to read.

Tales.—Fairy tales and heroic stories to be read to the children and retold by them.

Nature Lessons.—Lessons about insects, stories about animals, naming and mounting wild flowers or fruit. The child to keep a nature note-book, painting flowers, etc., and relating little facts and scenes noticed. Descriptions to be dictated.

French.—Oral teaching.

Geography.—Sand maps, talks about places, etc.

We need not be afraid of teaching children correct terms. Pistil and stamen in botany; current, whirlpool, pampas in geography, are really not more difficult to the early student in nomenclature than "Elizabeth" or "Caroline," the names of

their friends or relations. In the adoption of fancy terms, such as "officer" and "soldier" for pistil and stamen; in the relating of little make-belief stories in order to *interest* the child, we are guilty of want of respect for our pupils, and want of belief in the interest of the facts themselves, illuminated by the vivifying idea, which the clever teacher will draw out. Every subject is capable of being degraded into a mere collection of dry facts, just as (if the teacher be a true master of his art) the ideas underlying every subject may be used as pegs on which to hang such facts. Though we deprecate teaching through games, the child who finds in his lessons new ideas for his own games, who will play at Christopher Columbus or Robinson Crusoe, and make rivers and islands and mountains with mud or sand, or even with his vegetables and gravy (oh, horrified nurse!) will prove that his lessons have been well "taken" and hence well "given." No lesson is valuable which does not promote self-activity by making the children *think* and *do* and *work*. So in later years we would not advocate lectures from teachers, but lessons where, as has already been said, the teacher is but the interpreter, not the mediator, and where he stands aside as much as possible, teaching the children to *learn*, not to *listen*. In this way habits of self-study are formed in school, the necessity for out-of-school preparation disappears, and leisure and growing times are secured for the children.

Picture Talk.—Children, especially those who have not learnt to look long and well before schoolroom days began, will be much helped in their powers of description by ten minutes in the week being given to this subject. The child is encouraged to look steadily at some good picture, and then the picture having been removed to describe what he saw. The power of visualising is too valuable in after life to be neglected in the school days, and much training can be imparted through this lesson.

Arts and Handicrafts.—Brush-drawing, sewing and knitting, paper-folding, basket-work, clay-modelling, etc., a selection of these can be made for the little ones.

Music.—To be taught in such a manner that the child may learn its wonders and history from the first, and may learn to read by sight, write from ear, make his own scales and transpose simple tunes, before he attempts to *play* more than little duets, etc.

If it be urged against the following time-table that the lessons are very short (and the same objection may be urged all through the classes here described), I would answer that the teacher, after a little practice, will welcome the spur against dawdling for himself and the child, and will find that the rapid change of lesson not only *can* be done, but when done is beneficial all round.

N.B.—The tables which are not mentioned in the time-table would probably be taken by the mother in the "Children's Hour."

Parents' Review School. Class I. Time-table.

	M.	T.	W.	Th.	F.	S.
9.0—9.20	Old Testament	New Testament	Writing	Old Testament	New Testament	Week's Work
9.20—9.40	Printing	Drawing	Reading	Reading	Reading	Reading
9.40—9.50	Repetition Poem	Repetition Parable	Continue Reading	Continue Reading	Repetition Hymn	Continue Reading
9.50—10	French	Picture Talk	French	French	Nat. Hist.	Object Lesson
10.0—10.20	Number	Handicrafts	Number	Handicrafts	Number	Number
10.20—10.35 10.35—10.50	Drill or Dancing	Sol-fa Play	Drill or Dancing	French Song Play	Drill or Dancing	Sol-fa Play
10.50—11.20	Reading	Number	Handicrafts	Writing and Brush-Drawing	Handicrafts	Printing and Brush-Drawing
11.20—11.30	Nat. Hist.	Reading	Geography	Number	Geography	Nat. Hist.

CLASS 1B.—Children averaging from $7\frac{1}{2}$ to 9. Here the same time-table is used, but the reading lessons are less frequent, and are taken out of such books as "Old Tales from British History," "Tales from Westminster Abbey," "Lamb's Tales from Shakespeare," "The Heroes of Asgard."

English History and Roman or Greek History are substituted for the daily reading lesson on the time-table. In the History lessons use is made of chronicles (Bedes, Froissart, Freeman's "Old English History"). The lessons are taken as much as possible from a contemporary standpoint, the teacher choosing such passages as will leave with the children a true and just idea of the spirit of the times. "We want the children's imagination to be kindled by vivid pictures of the times; we want them to learn God's dealings with humanity, the sequence of cause and effect, and to train their moral judgment. Dates need not be omitted, and are welcomed as fixing the period dealt with in the world's history. In Plutarch's Greek and Roman Lives we find a storehouse of ideas, and great examples of man's power for good or evil in moulding the world." Moreover, by making use of a good translation (North's for example), the children's literary sense is fostered.

In the various other subjects more difficult work is taken. In geography the children are led up from the plan of the schoolroom and the immediate environs of the house to the use of a map. When the child can picture to himself the physical features of a country and the kind of life led in it, and when he knows how to use a map, he has pretty well mastered the knowledge of this subject, which will lead him to further study, and we need not quarrel with the Public Schools for not giving definite instruction in geography. The doors have been opened in the earlier days, and the habits of *finding out, of learning, and of work formed*, and we can leave the rest to life. What about the practical, every-day knowledge of capes, bays, and ports, of exports and imports that we are supposed to need? I contend that if a child has learnt to use a map, and if his lessons up to 13 or 14 help him to picture the physical features of a country, he would make a better list of the necessary imports and exports, etc., than the child who had *directly* committed these to memory.

CLASS. II.—Children averaging 9 to 11. (Probably at 10 boys would be sent to an ordinary preparatory school.)

Here the new subjects are *Latin, English Grammar, French History, and Composition*, whilst the other subjects naturally increase in difficulty.

As regards *Latin*, alterations in the time-table may be needed to suit individual cases. The boy who goes to a preparatory school at 10 may be required to know some Latin, but there is an increasing number of schoolmasters who prefer that no Latin shall be taught till the boys come to them at 10 or even 11. Even those who looked with apprehension on the "backward" boy, and feared that the few remaining years before he would have to enter a public school would be insufficient to teach him

what was required, have had to acknowledge that their fears were unfounded. The intelligent, well-trained child, with good habits of work and keen interest therein, will learn quickly and thoroughly, and the preparatory schoolmaster being freed from the onerous task of teaching how to learn, can look for steady and satisfactory progress.

English Grammar is taught with the sentence as a basis, and not by commencing with separate words.

Periods of *French History* contemporaneous with the English history, taken, form material for reading lessons. The time-table does not allow of definite instruction in universal history, but in this way and by the careful use of charts, children can gain an intelligent view of the history of the world and the interlacing of events. Such books as Southey's "Life of Nelson," "With Kitchener to Khartoum," "The Monk of Fife," etc. (according to the period) would be the kind of books recommended for outside reading to the children in this class. Whilst in the "Children's Hour" they might be introduced to Scott's, C. Kingsley's, and Bulwer Lytton's novels, and Shakespeare's plays, judiciously chosen, which will add interest to their history lessons.

In this class in *Geography* the children make memory maps and otherwise are taken further afield.

Dictation is now definitely commenced, though the ground has been previously prepared for it. Here the object aimed at is to let the child get a correct picture of the word, and the passages to be dictated (not words without their context) are therefore carefully prepared, so that no incorrectly spelt word shall leave its impress on the brain.

Composition also now first appears on the time-table, but unless the child writes with very great facility, it should still take the form of narrating the substance of books read or lessons received, varied occasionally by an original story, so that the habit of imagining and of expressing is not lost through want of exercise.

In *Hand-work* they would take cardboard slöjd, wood slöjd, or bent iron-work. Where possible they attend to their gardens with a certain amount of definite help and instruction. Gardening can be made a medium of much educational training, but the interest in it, except in special cases, is lost through the absence of a little judicious encouragement and supervision.

Parents' Review School. Class II. Time-table.

	M.	T.	W.	Th.	F.	S.
9.0—9.20	Old Testament	New Testament	Natural History	Old Testament	New Testament	Week's Work
9.20—9.50	Arithmetic	Arithmetic	Arithmetic	Arithmetic	Arithmetic	Arithmetic
9.50—10.20	Dictation	Composition	Dictation	Grammar	Greek Lives	Latin
10.20—10.50	Drill 10 m. Play	English Song 10 m. Play	Drill 10 m. Play	French Song 10 m. Play	Drill 10 m. Play	Sol-fa 10 m. Play
10.50—11.0	Repetition Poem	Repetition Bible	Repetition Bible	Repetition Poem	Dictation	Repetition Week's Work
11.0—11.20	Geography	English History	Geography	French History	Grammar	Botany
11.20—11.30	Copy-books	Copy-books	Copy-books	Copy-books	Copy-books	Dictation
11.30—12.0	French	Latin	French	Reading	Latin	French

And now the boy will probably leave the home schoolroom for the Preparatory School, either day or boarding, and as I am dealing with boys and not with girls I will not follow the timetables of the home schoolroom through Classes III. (11 to 14) and IV. (14 to 16). Must the entrance to the Preparatory School mean the abandonment of many of these subjects, and the teaching on quite other lines? I do not believe that this is in any way necessary. I have not been dealing with any special system nor advocating any special fad. I have tried to lay down certain more or less accepted educational principles, and have tried to show how these should be carried out from infancy up to the home schoolroom, and thence up to the Preparatory School. These principles are briefly the *furnishing of the mind* with *living ideas* on which to grow and develop, instead of trusting to the memory to assimilate only a daily pabulum of facts; the offering of *opportunity* to the mind to *exercise* itself in various directions, the *formation* of good habits which will go towards the building up of character, and the *belief* in the interest in the subjects taught, and in the strength of such habits to furnish the necessary stimulus for learning.

Many Preparatory Schools adopt these principles *in toto*, and their number is increasing. That the reform is not more rapid is, I believe, due to the fact that such methods of teaching are not calculated to inspire confidence in the parents, who may not have had the opportunity of studying educational thought. More showy and more direct results are often demanded, and hence the true educationist is hampered.

We are not dealing with the realm of the ideal, and we are not discussing possible reforms in the curriculum of our Public Schools, but I believe that a boy trained on some such lines as I have sketched will be able to hold his own, when he enters the Public Schools, even as they now are.

Many Preparatory Schoolmasters are shortening the hours of work, and are including nature lore, handicrafts, art teaching, and living methods of history, geography, and language teaching into their curriculum. They cannot, however, hope for satisfactory results in the four years, which is the average time the boys spend with them, unless the ground is prepared in the way I have tried to indicate. But the ground must not be prepared in an amateurish manner. It is almost universally recognised that the best teachers are required in the bottom of the school, and parents must fit themselves for the training of character, the formation of habits, and the inspiration of ideas, and must be willing to secure and pay for well-trained and inspiring governesses, who will conduct the children's first lessons. The days when the children's bodies were undernourished of set purpose, or through ignorance of the laws of health, are forgotten long ago, the days when "lessons at home with a governess" meant mind and soul starvation, are, let us hope, rapidly passing away. With reform in the foundation of things we may see reform and progress all the way up the educational ladder.

It has been pointed out by more than one schoolmaster that the continued setting of home lessons, to be done in the evening hours when the brain should be at rest, is, to a great extent, due to the parents. Leisure is desirable, but it must be well-used leisure; loafing and idling are undesirable. When parents realise this, when they assist the masters of day schools in the correlation of home and school, when they prove by their early training of the children that they know true educational principles, they may well claim a hearing even from that august and awe-inspiring individual—the Public Schoolmaster.

NETTA FRANKLIN

THE POSSIBILITY OF CO-EDUCATION IN ENGLISH PREPARATORY AND OTHER SECONDARY SCHOOLS.

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THE POSSIBILITY OF CO-EDUCATION IN ENGLISH
PREPARATORY AND OTHER SECONDARY SCHOOLS.

To many, perhaps to most, of those engaged in the practical work of education in this country, it will seem absurd even to discuss the question here advanced. Co-education, though not unknown in England, has not yet received much recognition, and is still in the category of educational "fads" needing an apology for their introduction among sensible practical matters of discussion. In my own school, where for seven years theory has been brought to the touchstone of practice, in the belief that only experiment can test the value of new methods and ideals, we have recently been making this experiment of co-education of boys and girls. What follows, therefore, is not written from the point of view of the arm-chair theorist; it deals first with the convictions that led us to take this step, and then with the conditions under which it has been taken, and with the results, so far as we can as yet see them.*

I.

It is natural enough that the joint education of girls and boys has not yet been commonly tried, except in countries where, owing to the conditions of life, it was at first rather a matter of necessity than of deliberate choice. Education is primarily the training of activities, and it was only natural that the boy, as destined for the more active life, should at first monopolize it. Hunting, the use of arms, state-craft and book-learning, seemed alike to be his natural prerogative; and so he was sent to Court, and to the Abbey to learn these things (and in later times, to the Grammar School, to learn their modern equivalents of games and "letters"), while the girl stayed at home to practise the household duties, to sew and cook, to become the nurse and servant of her lord and master. As long as life was based on fighting, this was inevitable. Different spheres of life—hardly touching except in babyhood, at courtship, and in old age—produced different ideals of education; and these have, in the main, survived down to our own day, though the conditions of life

* In a volume dealing with Preparatory Schools, it will be well to make clear at the outset, the different standpoint of the present writer, who, for reasons that will appear later, stands outside the Preparatory School system. In the experiment here to be outlined, we have as a beginning only taken girls under the age of fourteen, who take part in class-work games and so forth with boys of a like age. But as it is not our intention to limit the age up to which they may remain with us, and the experiment is being made in a school where there are already boys of sixteen and seventeen and even older, this of course introduces conditions that do not arise in the Preparatory School. Still some account of the way in which we are making the attempt and of such difficulties as we have found, may serve to raise most of the questions likely to occur in the application to any type of school.

have entirely changed, and the basis of fighting has given place, even for the upper classes, to that of work. In fact, the activities of either sex have become much more alike, and—welcome the fact or not—it remains a fact that to-day the sphere of activity for women is vastly enlarged, and growing continually wider; occupations and professions till recently reserved for men are thrown open to them. And for these, of course, a similar training is needed. And more: it is to-day admitted, that women as well as men have brains, and the same right to an intellectual life and intellectual interests, and therefore to a like training. There are plenty of unanswerable arguments for the higher education of women. That point has no longer to be argued. But why, most people will still say, should the education of women, higher or lower, be the same as that of men, even if it is to be similar? And why, above all, should we increase the risks and difficulties, for either sex, of a time of life already difficult enough when they are separate, by putting them together?

There are certain obvious differences (of mind as well as body) between the sexes, and these must certainly not be ignored in any scheme of education. The only question is how far these differences require an entirely separate treatment. Not in the nursery, at all events, has been the practical answer in all ages. Nor yet (is added in our own) in the Kindergarten stage of school. But when we come to decide at what age the line of separation must be drawn, the difference of opinion begins. The customary answer is "as soon as the boy goes off to school" at whatever age this may be, usually at nine or thereabouts. If pressed for a reason for the separation at this age (beyond the fact that there are hardly any schools which do not necessitate it) parents and teachers cite the growing strength of the boy which makes him physically the superior. If forced to admit that this alone is no sufficient reason, even school-life being no longer based (in theory at least) on brute strength only, they retire into the citadel of physiological fact: "women are not the same as men, and never will be, nor girls as boys, and can't do the same things, why try to make them?" And it is not enough, of course, to answer that in the earlier stages the differences are slightly marked. If the ultimate product is to be quite different, it is at least arguable, and is commonly assumed to be beyond argument, that the training should be different throughout. But, if we take even a narrow view of the purpose of education as preparation for the active work of life, so large a sphere of work is now common to both sexes that a large part at least of the training must be common too. If, however, we take a broader view of education as preparation for the whole of life, we must surely realize that what we want our school-training to produce is not, first and foremost, some special type, whether of man or woman, but a complete human being. I do not mean a nondescript creature without sex, a masculine woman or effeminate man; but one all the sides of whose nature are duly developed. If our school-training is to do this, it must, in the

interest both of boy and girl, be wide enough to include all that is needed by either; for there is no quality possessed by the one that is wholly denied to the other. Indeed, is there more difference between normal boy and girl than between different types, equally normal, of the same sex? We cannot turn all boys into one type of manhood; and any curriculum wide enough, as it should be, to allow to each the fullest development, will be wide enough to allow it to girls no less. We do not yet know, in many directions, what are the permanent differences of ability between the sexes. At present we have not enough experience of the results of "higher education" to be able to decide, except on *a priori* principles, what differences of training there should be. Here, as in all departments of life, the only just course is to put the sexes on an equality of opportunity in order to let them show the differences that are real, and not due to conventional differences of upbringing.

But even if it be admitted that a girl should have, to all intents and purposes, the same training as a boy, that is still a very different thing from admitting that they should have it together. There are now many successful girls' schools modelled on the type of the Public and Preparatory schools for boys, in some respects even superior to them. Do not these give from the girl's point of view all that is required? and from the boy's, is there anything but loss in modifying in any way their course of training, and introducing a danger which it is folly to overlook? If it were merely a question of convenience or of economy that were under discussion, then such arguments would have weight. But the whole question centres here, in the impossibility of giving either sex alone a true and complete training for life. As far as bodily training goes there is, perhaps, comparatively little loss. But when we have to deal with the mind, the loss is greater; for to broaden and humanize the intellectual outlook of either sex, what is so effective as the interaction of different faculties and points of view? And when we come to character-training, the highest end of education, the result can only at best be partial. Separated almost completely through the ten years or more of conscious growth—the shaping of the habits and ideals of life,—what at the end of the time can they have in common, not only of interests and memories, but, one may almost say, of instinctive feelings and powers of mutual comprehension and sympathy? And in the meantime, while we are doing everything to develop in each sex one set of virtues (involving, of course, corresponding defects) we are leaving another side of character almost unexercised; and at the same time leaving both boy and girl unprepared to meet—or, rather, only too fatally prepared to meet it ill—the time when sex-attraction asserts itself as an overmastering impulse.

For the sake of both sexes, then, both during the school years and in the years for which these are the preparation, to work together and play together and live together is of the first

importance; and it is well worth trial to see if the difficulties supposed to be inherent in the plan prove to be insuperable or no.

Brought down to the simplest form, these objections (to say nothing of the old prejudice, no longer tenable in face of women Senior Classic and Senior Wrangler, that girls can't learn Latin and Algebra, and are fit only for drawing and needlework) may be summed up thus:—

- (1) Girls can't play football.
- (2) Girls can't rough it, whereas boys must.
- (3) Schools are morally bad enough without this to make them worse.

The first objection is a half-truth that begs the question. Even if girls cannot and should not play football, they can and should play other games in which boys can take a part. Nor does this mean that football should be given up. There must of course be games for the strong; but in play as in work we want more variety. There are boys too for whom perpetual football is not advisable. But if our school games include in winter (besides football) hockey and lacrosse, in summer tennis as well as cricket, in all these girls can hold their own, even playing with boys. Of the value of these games—boys' games as they have generally been considered—for girls, any who are yet doubtful would do well to read Miss Lawrence's article (based on twelve years' experience) in a former volume of Educational Reports.* I am not now concerned to prove their value over again, but only to point out that there is an additional element of no little value in the comradeship that comes from playing together. And for this it is not necessary that *all* games should be played together, though most, I think, if due regard is paid to the age and strength of the players, will gain by their intermixture—and without loss, too, as some fear, on the part of the boys.

But the girls (we are told) must not be expected to rough it at school like boys. They must not undergo the time-honoured hardships of fagging and bullying. And what if they were to learn to swagger and bully and swear, to shirk and "crib," and the rest of it, according to the immemorial tradition of boys' schools? One may well shudder at the picture; but instead of using it as a *reductio ad absurdum*, should we not ask ourselves if all this is necessary for boys. Fathers who have been through it all themselves, whose wounds are now long scarred over, and who remember only the bracing formative effect of the free full life, may answer, "Oh! yes; does 'em good in the long run." And yet, are the mother's doubts and fears only foolish fancies born of ignorance and weak nerves? Boys must learn to rough it certainly; they must learn to give and take, to stand on their own feet, to hold their own in the world. And

* See "Special Report on Educational Subjects," Vol. II., pp. 149-150.

must not girls too? It cannot for either sex be an easy process; but must it be a brutal one—brutal and brutalizing? And even if the worst forms of brutality are gone from boys' schools, if they are no longer what they were, for instance, in *Tom Brown's* school days, still there is much to do to humanize them. And here at least the presence of girls will help. For my part, I am not afraid of the atmosphere of school becoming through their presence too soft and enervating. There will still be knocks to take, a wholesome rubbing off of corners, a sifting of the real from the adventitious which can never be an easy process. But will it be the less effective for being less brutal in its methods, and for being shared by both sexes? In our schools, most of all in the Preparatory Schools, much has already been done to soften the process, to civilise instead of brutalizing, and I do not know that anyone really thinks they are the worse for it. If it can be done not only by supervision from above, but by the growth of new ideals of chivalry and gentleness from within, I for one shall have less fear of possible degeneracy from true standards both of manliness and womanhood.

But this (it is urged) is opening the door to flirtation and all the evils of premature awakening of sex. It is precisely to avert this result that we need more intercourse of one sex with the other; frank every-day intercourse and comradeship in work and play that alone can give a common basis of interest and sympathy to replace the mutual contempt, overlaid with sentimental silliness, which at present we seem to be content to regard as the natural relation of boy and girl! And are not these false ideas and relations fostered by the unnatural conditions of school life, the barrack, the separation, the repression of sex which drives it into unwholesome channels? If we had gone about to produce morbid feelings and conditions we could hardly have been more successful. But while this is admitted by all who have intimate knowledge of schools, both of girls and boys, they feel (and rightly) that to attempt intermixture *after* this stage has once been reached is madness. What we have to do is to prevent the reaching of such a state of things; to put off, instead of forcing, the bursting of the sex instincts into self-consciousness; to establish, by an uninterrupted community of life and interest, a true basis of knowledge and sympathy to replace the false basis of sentiment in the intercourse of boy and girl; and gradually to give, by such guidance as is hardly possible except at school, a conscious control of feeling and instincts that can be made either morbid ministers of folly or motive-powers, strong and healthy, to all good.

These, then, are some of the reasons that make some teachers feel that the best part of our work is only half done if we do not have girls and boys together, on terms of complete equality, not only in the nursery and at home, but through the most formative years of life, at school and college. And to avoid a fruitful source of misunderstanding, let me emphasize once more the fact that equality does not necessarily imply identity of work

or games. The curriculum of a school, both in the class-rooms and playing-fields, may easily be too rigid; and if, by the necessity of considering the needs of both sexes, it is forced to broaden in some directions, it will be to the gain of both.

II.

Before touching upon an attempt to frame a curriculum to meet the needs of both sexes, it will be well to see under what conditions co-education has already been tested in practice; for in considering whether it is practicable in this or that type of school, we must not forget that in this as in other matters, it by no means follows that an educational system that works admirably under one set of conditions can be transplanted with equal success to another.

It will be readily admitted that the simplest conditions, and those under which co-education is most likely to succeed, are those of the day-school, such as obtain in the cities of America, among the Scandinavian peoples, and in the peasant schools of all countries, except where "modern enlightenment" has insisted on the separation of the sexes. And in America at least, co-education has not stopped short at the primary school. What American teachers think of it may be judged from the following extract from a letter of Mr. Sanford, Headmaster of the Brookline High School, the best known Secondary School in Boston, numbering last year 339 scholars between the ages of fourteen and nineteen, boys and girls in almost equal numbers:—

"In Brookline boys and girls enter the Kindergarten together at five years of age, and travel side by side from grade (form) to grade for thirteen years. They go to and from school together with the utmost freedom, sit in the same study rooms, and recite in the same classes. Such companionship is attended by the best results for all concerned. Undue intimacy gives us no trouble whatever. Petty flirtations are almost unknown. The boys unconsciously acquire something of gentleness and ease of manner from the girls, and they with no less advantage and equally unconsciously gain some of the robuster virtues of the boys; and yet I cannot see that the boys show any tendency to become effeminate or the girls to be unduly masculine. It is a good and wholesome thing for the girls to gain the confidence which comes from association with the boys in their studies, and no boy who has attended a mixed school will ever afterwards retain any foolish notion about the 'superiority of the masculine mind.' Indeed, I am disposed to put down as one of the chief advantages of such an experience, the increased respect with which the boys come to regard the girls.

"Good comradeship without premature sentimentality is the sure fruit of *thorough-going* co-education, making possible that complete co-operation between men and women which the world needs.

"In the matter of play we have not attempted so much as you propose. During the earlier years of school life, there is complete participation; later, when the secondary school age is reached, tennis is about the only game that brings boys and girls together. Then the rougher sports of football and baseball (our national game) claim the attention of the boys, and the girls devote themselves most enthusiastically to basket-ball. In bicycling, skating, and school excursions, all take part; but it should be remembered that ours are morning day-schools, so that most of the pastimes of our pupils take place when we, the teachers, are not directly responsible for them. The American parent, however, is far more lenient, not to say indulgent, than is the case in Europe, so that boys and girls see much more of one another there than they do here, and, I honestly believe, with most excellent consequences."

Such a statement as this, coming from one who has every claim to speak with authority on the subject, is striking evidence in favour of co-education in the day-school, and his evidence was supported with wonderful unanimity by all the speakers, American and Scandinavian, at the discussion on this subject in the Educational section of the International Congress of Women, held in London in 1899. But it is not only from other countries that such evidence comes. Co-education has already been put to the test in many quarters in England, in schools of different types. For example, in the Lady Manners Grammar School at Bakewell, a day-school drawing its boys and girls from a considerable local area, it has been in practice for some years, with excellent results.*

In 1898, the King Alfred School Society was founded in order to establish day-schools, based upon certain educational principles of which co-education is one. The first school was opened at Hampstead, in May, 1898, and in 1899 it numbered thirty boys and girls, in equal numbers, between the ages of eight and fourteen. As the result of his experience, the Headmaster, Mr. C. E. Rice, writes:—

"The presence of boys and girls together has created no difficulties in class-room or elsewhere, particularly *none* of those specially anticipated.

"In work, the attitude of the girl and boy-mind towards the various class-subjects is not identical; this, far from being a drawback, is a great advantage, leading invariably to a broader discussion of the subject. The girl introduces a higher standard of industry and attention to detail; the boy contributes directness and independence of thought. The boys become less reserved, and readier to display feeling, while the girls become less imitative, and passively receptive, more critical and self-reliant. The boys do not lose these latter qualities, but the contrast rather stimulates and develops

* For an account of this experiment, see the "Review of Reviews" for January, 1898, pp. 66-68, and the "Record of Technical and Secondary Education," January, 1900, pp. 109-118.

"them. The girls have caught the boys' attitude towards mere
" 'bookishness,' becoming more inclined to action and active
" thought.

"In games, combination is more readily secured, through the
" greater readiness of girls to play for the good of their side.
" Girls have learned to accept defeat and failure without loss of
" temper and dignity. The girls do not take part in football.

"Boys who are difficult to control in class and elsewhere, are
" owing to their desire for the approbation of their fellows, more
" easily disciplined, since the teacher can more readily influence
" the girls to disapprove of irregularities and disorder. The
" presence of girls makes it easier to appeal to a communal
" feeling, and a general spirit of cheerful readiness is more easily
" cultivated.

"The children are less reserved, showing the affectionate side
" of their nature without embarrassment, and the happiness of
" school-life is generally enhanced, suggesting more the home
" atmosphere and the spontaneity associated therewith."

A little before the King Alfred School was started, another
experiment in co-education was begun at Keswick. A distin-
guishing feature of this school is that, besides some sixty day-
scholars of both sexes, boys slightly preponderating, there are
also a certain number of boarders (in 1899, four girls and
eight boys) of ages ranging from eight to eighteen. Mr. Grant,
the Headmaster, writes to me:—

"The girls improved out of all knowledge in a month. At
" the end of the first term the boys were softened (they were
" very rough on coming) far beyond what would have been
" possible in a school for boys only. There is an intense desire
" to improve in these ways. The girls quite hold their own in
" work, though the two or three cleverest happen to be boys.
" Discipline—though Keswick boys had an unenviable reputa-
" tion—has been very easy and good, both by masters and
" mistresses . . . There is more keenness about marks than
" is usual in a boys' school, but no more competition between
" boys and girls than between boy and boy.

"Games have been most successful. At the start, neither
" boys nor girls had played anything properly. The boys pro-
" duced a very keen Rugby XV., the girls a remarkably good
" hockey XI. Boys have done very well at cricket . . . girls'
" cricket less successful. They play in the same field . . .
" often small boys play against or with the girls. Both boys and
" girls are very happy. There is a generally friendly spirit, and
" 'Public School' tone is growing with wonderful rapidity."

III.

There is little question, then, of the possibility of co-education
in the secondary day-school in this country as much as in
America. But whatever may be the future of the day-school in
England, at present our system (so far as it can be so called) of

secondary education is in the main, for good and for evil, a boarding-school system. Why this is the case it is not necessary here to discuss; suffice it to say that it is the result at once of the conditions imposed by a country life and of the consequent tradition among the upper classes, re-inforced by the feeling amongst those who live in towns, that children, wherever possible, should be brought up in the country. But, these and other reasons apart, it remains to point out that the difference between the two kinds of school, while it affects the intellectual side of education but little, on the side of physical and moral training, is of enormous importance. For the boarding-school takes over for the greater part of the year, during the most critical years of life, the entire charge of a child, body and soul. Beyond its boundaries even his thoughts rarely go; its rules and traditions decide his actions, down to the least details; its spirit shapes his life as few things else can do. Even yet schoolmasters seem hardly to have realized how much the school can do, otherwise they would surely pay more attention to the all-important questions of food, clothing, fresh air, healthy hours, and daily habits, as well as to the weightier matters of the law. These things are now no longer ignored at any school, yet still we see everywhere the "tuck-shop" supplementing an insufficient diet; the Eton suit, insufficient clothing in winter and unsuitable for any form of exercise; stuffy class-rooms and cubicles; brain-work before breakfast and late at night; and the contented leaving to chance what habits school shall foster. And in all matters of this kind girls need training no less than boys, a fact which is fully realized in a few at least of the large girls' boarding-schools. But if on this side the boarding-school has far more means than the day-school of shaping a child's life (the real work of education), it has a corresponding disadvantage in the absence of the home-life with all its refining influences and nourishment for the affections. There are many fine qualities for which the life of a large boarding-school affords an admirable training, and qualities which it is by no means necessary for boys alone to possess. That girls need no less to learn the lessons of self-government, responsibility, and independent action, is scarcely any longer subject of dispute; and that the day schools, however excellent on the intellectual side, do not give all that is required is evidenced by the growth of boarding-schools for girls on the model of the Public School. But if they share the excellence of the latter in the wider range of their life and in the new faculties that their internal organisation calls into play, they suffer from the same defects. If from the point of view just mentioned, the life of the boarding-school is far wider than the home life, from another, no less important, it is far narrower, in the absence of the continual intercourse of both sexes, both on the part of the children with each other and with their elders. And this one-sidedness of life and interests leads in either case to a certain narrowness of outlook and of character, on the one hand to an exaggerated, unnatural development of sentiment,

and on the other to a worship of mere strength, usually in its most material form. Hence the morbid conditions so prevalent in schools, and the misuse of strength for tyranny instead of service. Both boys and girls need a wider view, an enlargement of the traditional "code" to include the others' ideals, and a healthiness of tone that will laugh or shame out of countenance alike the exaggeration of natural feeling and its absence.

That such a tone may be established in a school of one sex only, and, once established, may make its own traditions and last for a considerable time, I do not for a moment deny. But is it not rather in spite of the conditions than because of them? The knowledge how far these conditions are, at best, from those of a well-ordered home, makes many feel that the boarding-school is only an unfortunate necessity, destined to disappear; and though others, looking at the great value of the training that a boarding-school can give, do not share this feeling, they believe that the more nearly the conditions of school-life can be assimilated to those of home (as has, indeed, been the tendency of recent years) the better and the more effective it will be. Such conditions are surely best to be found in a mixed school with a mixed staff. The importance of this latter point is to some extent already admitted as far as boys are concerned; yet in boys' schools women's influence is confined to the matron's room, the occasional visit to the house-master's drawing-room, or, at most, the beginners' classes; while from the girls' school with its traditions of the convent everything male is banished except the porter and the shoe-black. In the staff no less than in the school is needed the interaction of ideals and methods complementary of each other; and it is this interaction, in class-room and playground and in all the details of daily life, that alone can take the place at school of the unconscious influences of home.

In considering the possibility of co-education even in a boarding-school system, it is obvious that the weight of such objections as those already touched upon,—and the many others like them which will never be removed by argument, but only by degrees (we may hope) by practical experience—is much less if it be confined to the Preparatory School age. In the Preparatory School, some of the more difficult questions hardly arise, or at least seem to be comparatively simple to deal with. Not only in the age of the boys, but even more in the supervision (I do not mean *surveillance*) that is allowed to be necessary at this age, is found a safeguard against the worst evils of school life. Is it to be supposed that this would be made impossible by the introduction of girls? Those at least who have tried have not found it so. In the Friends' School at Ackworth, for example, where girls and boys, who remain up to the age of 16, have always occupied separate wings of the same building, though until recently their education was kept quite distinct, under the present headmaster some intermixture has been introduced in the senior classes; and Mr. Andrews tells me that it has proved so successful that he would like to go much further in the same

direction, and that in his opinion any difficulties that the presence of the two sexes in the same building has occasioned would be diminished instead of increased by a more complete freedom of intercourse.

But though at this age co-education is, without doubt, easiest, it will not do half its work if it stops here; the full gain is not attained unless it is continued all through school-life. And indeed, under any circumstances, a break in the school-life at the age of 13 to 15 (as is usually the case under the Preparatory School system) is, so it seems to me, to be deplored. I am no great believer in a system, however otherwise admirable, which separates according to age, and which throws a boy into a new life, under entirely new conditions of government, at the very age when his difficulties, physical, intellectual, and moral alike, are greatest; when he most needs guidance, instead of being thrown upon himself, finding his position in his world suddenly reversed, his experience to learn again, and yet the utmost demand made upon his self-control and strength of will. Even if this is often to be his lot in later life, is it wise to make it the rule for years when the character is still soft to take any mould? Such a system is certainly convenient for the schoolmaster; it removes some of his difficulties (difficulties which, however, rightly understood, are his best opportunities), and seems to lessen his responsibility. But it throws the brunt of the battle on the boy at the most difficult time of his life; and it diminishes, both earlier and later, one element of training which seems to me amongst the most valuable that school has to offer—the association of younger and older. What more effective means of training can there be than the natural “hero-worship” of the young? Yet this can hardly find full scope in the Preparatory School. To the child, pastors and masters, like other grown persons, belong as it were to another world; their rules are like the forces of Nature, to be obeyed (or broken) but not understood. His real guidance comes, in most cases, from elder brother or friend, who, while yet belonging to his own world, seems all-powerful and all-wise. This is the natural guidance of the young, giving direction and repression in its most effective and least resented form, and calling out the half-conscious imitation which is Nature’s own method of teaching. And to the older, in turn, there is no less gain in the sense of responsibility towards the weaker, with the need of self-control to reach a firmness which can yet be gentle. But a system which draws, at 14 or thereabouts, a line of separation, goes far to weaken the force of this double bond. There are, as all admit, grave dangers in mixing boys of different ages, as in mixing different sexes; but, in both cases, in trying to avoid certain possibilities of evil we miss great possibilities of good. Even where there is not such mixture, these dangers are not absent; if they cannot be met then the boarding-school stands condemned without further question. But they can be met, if we will adopt a bolder course than that of shirking the problem by putting our trust in age-limits and other such bolts and bars, and, worst of all, by

silence. Even if such safeguards are effective for the time, they do nothing to establish any rule of conduct or principle of action for the future. Mere absence of danger is no training, as it is no proof, of morality. We are at best only postponing the danger without giving the power of facing it when it comes. It needs another method of treatment than the merely mechanical safeguard. To many parents and schoolmasters it seems, of course, only to be making needless difficulties to put different ages and different sexes together. But in this, as in other educational questions, we have to think of the ultimate and not only of the immediate result. And the ultimate result is the formation of true or false sex ideas, and true or false relations of the sexes throughout life. And to this end we must not insist on unnatural conditions in childhood, but rather make and keep them as natural, if possible, as in the family itself,—consciously facing the dangers ourselves, and teaching children, as they grow older, consciously to face them too for themselves and others. It needs the work and devotion—such as we see in every school—of men and women, but *together* instead of separately; it needs thought and care of organisation, and tact of guidance,—to know when to refrain as well as when to intervene. And it needs the frank treatment of sex, not sermon-fashion from above, but in mutual confidence, as fully as age allows. But all these things are only the necessary means to make possible the most truly efficient factor—the free, equal daily intercourse, with its daily lessons of self-control and mutual understanding and respect, growing to habits of thought and action, and thus laying solid foundations for the future. And it is for this reason that, while recognising the difficulties, I look for the real gain of co-education if it is carried on throughout the whole of school-life.

And this is not an absolutely untried thing in England, even under the conditions of a boarding-school. Besides the school at Keswick already mentioned where both girls and boys are taken as boarders, the girls sleeping in a separate house, but eating and mixing in play-room and library together with the boys, another example, of longer standing, is Craigmore College. There, taking the last seven years, the average number of boarders of all ages up to 18 or 19 (in addition to day-scholars for a part of the time) has been 34, of whom one-third have always been girls. "There is a complete separation" (writes Mrs. Ralph, wife of the Headmaster) "of the boys' and girls' quarters, both "for sleeping and sitting-room purposes, though there is a common meeting ground in the College Hall and on the tennis-ground. There are always two members of the staff on duty, "one a man, the other a woman. The boys and girls, men and "women, with us, all meet at the three principal meals of the "day, at morning and evening prayers, at the services, in the "debating society, house concerts, and such like, and all, at "least without question of sex, take part according to their "several abilities in these functions. Of course all meet if the "school gives itself an 'evening party,' and no restriction."

"such times or at picnics, &c., is put on the social grouping of boys and girls together. By invitation of the lady-in-charge boys may join the girls in the tennis-ground for games, and the girls often watch a special cricket or football match, though they do not (except occasionally at cricket) join in those games.

"Girls and boys are classed according to their abilities, and are not separated in their work, either in class-time or preparation . . . all are taught the elements of science, drawing, French, Latin, and Mathematics.

"The difficulties arise, I think I may say entirely, from the previous separation, and all the ideas and injudicious treatment which follow on that system. But since the 'atmosphere' of the school has been created, we have had really very little difficulty; and even these have soon yielded to the sturdy commonsense views of the majority. The results, in all directions, have been highly commended alike by the parents and by old pupils themselves."

IV.

To this evidence, the outcome of many years' experience, let me add, in conclusion, a few words as to our own experiment in the same direction, which differs in several particulars from those already mentioned. Girls were here introduced into a boarding-school numbering some sixty boys of all ages from nine to eighteen, that had been for six years a boys' school only, so that by this time its rules and traditions had already been pretty thoroughly established. But from the first the curriculum and organisation of the school had been framed upon lines differing in some respects from those usually followed, and very little modification was needed on the admission of the girls. With us, girls and boys live in separate houses, and so much therefore of the school life as is concerned with the 'house'—evenings chiefly, and Sundays—is necessarily separate. But this is only a small portion, as the girls come down to the main building after breakfast, remain there for all class-work and, on most days of the week, for the other meals and for games, and on some days throughout the evening also for the music or lecture, dancing, recitations, &c., with which the day ends. For something like twelve hours, therefore, of the twenty-four girls and boys are together. Our day falls into three natural divisions. The morning is mainly devoted to the usual disciplinary studies, language, mathematics, and science. All of these, including Latin and a modern language, every girl and boy must take, there being no distinction (such as that of classical and modern sides) until, at the age of sixteen or so, each can follow a special line of work as natural bent or later requirements may dictate. In the afternoon is only manual work, such as carpentry and gardening and drawing (these being taken by all), music for those who learn an instrument, and games. In the evening the classes are confined to such subjects as history and literature, in which the rousing of interest is the first aim; there is class-singing for all, and then,

for all but the oldest, who have a certain amount of evening preparation, there are various occupations such as carving, book-binding, and sewing, or the music, lectures, &c., above mentioned.

In these things girls and boys take part without distinction, except that the girls work by themselves in their own gardens instead of sharing the rougher outdoor work. In games they join the boys in tennis and cricket according to their age and ability; instead of football they play hockey, in which the younger boys also join. Drill at first was taken separately, but the result of our experience is to make us wish to extend, wherever possible, instead of limiting the field of common action. Swedish drill is now taken by girls and younger boys together. Besides games, they join in all holiday outings, the Sunday walks, bicycle rides, natural history expeditions, and so on; and in all these things, work and play alike, girls are on an equality with boys, not (for example) sitting separate at meals or in class, nor treated as different beings, except when, as in the arrangement of a game, physical strength must necessarily be taken into account.

Such is a brief outline of a curriculum that we regard as equally suitable for girls and boys up to the age at which the later professional training must begin. It remains to speak of the difficulties that have shown themselves.

Of those that critics seemed most commonly to fear, silliness in the behaviour of each sex towards the other, and rudeness on the part of the boys caused by dislike to the change, there has been but little. There was, of course, a certain amount of prejudice to overcome amongst the boys; but this was practically done before the change was made, and, when it was plain that the freedom and happiness of the life was in no way lessened and the first strangeness had worn off, the feeling soon faded, and there is not now, I think, a trace of it remaining, but the presence of the girls is accepted as perfectly natural. Of silliness there was also, of course, something to overcome, amongst the younger especially; a rivalry to sit by such and such a girl as being "the prettiest," or the wish to have such and such a boy as companion for a walk because he was "an angel" in his behaviour! But alas for those who had prophesied that this must henceforth be the normal state of things throughout the school, before the first term was over it was already dead,—laughed away and forgotten. And in like manner any tendency on the part of older boys to make too much of the girls, whether in the way of playful teasing or letting them do too much as they liked, was soon brought to an end by pressure of the commonsense and good feeling which can be found in any community (even of boys and girls) and made into a potent force.

But there are difficulties more real than these to meet. Where, as with us at present, there are but a few girls in daily contact with many boys the influence of the one sex on the other is as yet too much one-sided. It needs much care to see that girls do not simply adopt boys' ways and boys' language. Probably every healthy girl goes through a "tom-boy" stage, during which this is likely to be the case, and there will be imitation.

both conscious and unconscious, which may easily go too far. Until the stage is passed and another tradition formed, some guidance—not mere repression—is needed. And every year, bringing growth of age and numbers, will help to give weight to the other influence. Again, in the introduction of girls into a boys' school with its traditions of self-government already established, there is another problem that has to be worked out. Amongst boys a large part of authority has to this day remained frankly founded on bodily strength; its rules and penalties are still largely based on this. With the admission of girls into the school-society new conditions are entered upon, and a new foundation of authority is necessary. And a boy is not slow to feel this, though he may be unable to express the feeling otherwise than "Well, you see, you can't lick a girl." And precisely in this feeling that brute force is not everything, that there must be an appeal to something else, is one of the greatest gains of co-education. It is a real problem for boy and girl to work out, and at first by no means an easy one. But with the consciousness of the need to solve it the battle is already half won. Help and guidance are necessary until the new conditions are mastered and shaped into new laws, soon to become as traditional and as well-sanctioned as the old. And when they have so worked it out in common, school becomes a place of far truer training for both.

The results of such an experiment cannot be added up like a row of figures, least of all while it is still young. But already there are some things plain. In work the girls hold their own with the boys in all subjects, and their greater application and readier enthusiasm already tells upon the boys. In games, of course, the positions are reversed, and here it is of great value to the girls to have a boys' standard of excellence constantly set them. Whether cricket will ever be thoroughly established as a girls' game is perhaps doubtful, but it is certainly well for them to learn to play, if only to get a training which no other game gives in the same degree. In the other school games (football, as before said, excepted) there need be no question as to their taking part with success.

But success in work and games is not everything, though if in these there is mutual help through the presence of the other sex, this alone is no small argument for co-education. But after all it is in the large field that lies outside the regular routine of work and play that the influence of the one upon the other is most real, if not most felt. Not, of course, that there is any sudden change, but it is none the less real for being chiefly unconscious. The girls, perhaps, feel it most; the freedom and independence of a boy's life, with its large amount of self-government and its ideals of "honour" and "pluck" are to them a new and larger world. To the boys the change is felt, if at all, rather as a limitation, a check on language and behaviour. And it is difficult to say for which the gain is greater, even in the present, while for the future the best promise lies in the "naturalness" of it all, the absence of self-consciousness on the part of one sex

towards the other, to gain which is surely worth the facing of difficulties that prove less formidable the more boldly they are faced. In co-education even more than in other things I am convinced that it is half-heartedness that means failure. The more completely both sexes can be brought together upon an equal and natural footing, the less the difficulties grow. We must know our girls and boys and have their confidence, and show them that they have ours. It is not by separation, by suppression of natural feeling, or by suspicious surveillance that any real and lasting good is to be attained; but by wholesome and natural conditions, by mutual confidence, and, if necessary, by the rejection of the unfit—those for whom the healthy atmosphere of such a life comes too late or works too slowly. And these in childhood, happily, are few.

J. H. BADLEY.

NOTES ON A PREPARATORY SCHOOL FOR GIRLS.

As it may be interesting to some readers to make a comparison between the education of boys and girls of preparatory school age, the head mistress of a preparatory school for girls has kindly furnished us with particulars of which the following is an abstract. The school in question contains nearly 90 girls, more than half of them boarders, the average age of the girls on entrance being just under 11 years, and on leaving $13\frac{3}{4}$ years. The school is divided into 10 classes, the largest number of girls in one class being 12, and the smallest 6. The teaching staff attached exclusively to the school consists of 12 mistresses and four students. There are also two visiting teachers (a riding master and a dancing mistress).

1. CURRICULUM.

The school has nothing to do with outside examinations. No girls are allowed to specialise for any scholarship examinations. The class work in the school is all done in the morning, with one interval of 15 minutes for play between 9 a.m. and 12.30, and shorter breaks between the other lessons. In the morning there are four lessons of half an hour and one lesson of three-quarters of an hour,

The hours of work are apportioned as follows :—

—	Before Breakfast.	Between Breakfast and Dinner.	Between Dinner and Tea.	After Tea.
On full working days.	None	$2\frac{3}{4}$ hours	1 hour prepa- ration. $\frac{3}{4}$ hour handwork or dancing.	None except piano prac- tising.
On half-holidays	None	$2\frac{3}{4}$ hours	None	None.

Each upper form is in three divisions, each division in charge of a mistress. The girls are re-classified in each form for English, French, Latin, and Mathematics. In the lower forms the girls learn all subjects together. Latin is begun at the average age of 10 years. French is taught before Latin, but not as a grammatical study until the principles of grammar have been grasped through Latin. Neither German nor Greek is taught in the school. The head mistress is in favour of post-

poning Greek, in all cases, till the public school is reached. Stress is laid on teaching all the girls drawing, carpentering, and singing. Elementary science is taught in the school:—Object lessons in the lowest forms, and botany all through the rest of the school, with very elementary astronomy, which runs over into recreation, as the school has a good telescope. Under the head of English, the proportion of time devoted to spelling and dictation is 15 per cent. (more in lower forms), to original composition and reproduction 30 per cent., to language (grammar, word formation, &c.) 40 per cent. (chiefly analysis, less in lower forms). Four to six lessons a week are given to French, the amount varying according to term and form. Younger children have more as a rule. Preparation for French lessons amounts to about 40 minutes weekly. French is now taught entirely by English teachers. It is taught conversationally in class and to some extent in recreation, a few girls who speak French fluently keeping it up with a mistress, and all boarders learning French songs and plays from time to time. The head mistress thinks that very much more might be done than is usual at present in the way of giving children an interest in French by means of games and stories illustrating French life. In history, as a rule, two half-hour lessons are given in each week, with 10 or 15 minutes preparation for each. Only English history is taught, except in the case of older girls, who read a little Roman history in French. A good deal of general history is taught in geography lessons. The aim is to give an outline of English history which can be filled in at the public school which follows. The head mistress thinks that the learning of historical facts and of some dates is useful for the future memory-work of history, but is of opinion that, for girls of preparatory school age, history is not a very useful subject. It demands too much of the reason and of the judicial faculty; and girls are apt to take up opinions without sufficient grounds. History, in her opinion, should, when taught to such young girls, appeal more to the imagination than to the reason. Geography, on the other hand, the head mistress regards as of the highest educational value. She would like to see it more largely and generously taught. The minimum of geography teaching in the school is two lessons of half-an-hour each with 15 minutes of afternoon preparation for each.

Two hours a week are given in each form to religious knowledge. To arithmetic six hours a week are given in the two lowest forms; four hours a week (with one exception) in the higher ones. In all forms there is one hour of preparation, four days a week, with the assistance of a mistress.

2. HEALTH AND PHYSICAL TRAINING.

The girls get up at 7 a.m. summer and winter, and go to bed between 7 p.m. and 7.40 p.m. There is no school before breakfast. The head mistress considers the best hours for meals for girls of this age to be as follows:—breakfast, 7.45 a.m., slight luncheon, 10.15 a.m., dinner, 1 p.m., tea, 5 p.m., slight supper

7 p.m. Each lesson should last 30 to 45 minutes, one hour being too long for girls under fourteen. A good division of the morning work is as under:—

First lesson	-	-	half-hour, 5 minutes break.
Second „	-	-	half-hour, 10 minutes for luncheon.
Third „	-	-	three-quarters of an hour, 15 minutes out of doors, or, if wet, at drill.
Fourth „	-	-	half-hour, 5 minutes break.
Fifth „	-	-	half-hour.

Any mathematical subject, especially for little children, should come first, or after a refreshing lesson such as Singing or Hand-work. Latin should come when the girls are pretty fresh.

The girls are under supervision all day, but there is a good deal of latitude; *e.g.*, in the playground a girl may work at her garden or a few may start a game of their own. In the boarding houses the girls have some time every day when they can do as they please, though a mistress is present.

Slight ailments are nursed in a sick room, others in one or other of two separate buildings, reserved the one for the nursing of infectious and the other for that of non-infectious complaints.

3. ORGANISED OUTDOOR GAMES, &c.

The head mistress experiences no opposition on the part of parents to compulsory games, nor has she, in five years, known of a serious accident arising from them. Compulsoriness of games is modified in favour of individual girls who possess pronounced tastes of an open-air but non-athletic order. Outdoor exercise in wet weather is insisted on in the case of healthy girls, but there is much opposition to this on the part of parents of day-pupils. The playground dress is the gymnasium dress with a warm jersey for winter and a thin woollen blouse for summer. One mistress is occupied almost exclusively with the playground and gymnasium. Other mistresses, but not nearly all, assist. The games mistress was trained by a cricket professional. In summer one hour a day, on an average, is devoted to compulsory cricket, and in winter one hour a day, on an average, to compulsory basket ball, played indoors or out, according to weather. All girls who bathe learn to swim. In 1899, 82 per cent. bathed, and of those who bathed, 90 per cent. could swim at the end of July.

4. SCHOOL LIBRARY AND GIRLS' PRIVATE READING.

There is a small school library, of which all the books are in constant use. Each house has its own library besides. Restrictions are placed upon the admission of newspapers and periodicals into the school, and a list of what may be sent is supplied to parents. All new books are brought by the girls to the

head mistress at the beginning of each term, and no book is allowed into the play room which is not initialled by her. There is a regular system of reading aloud, two sets having reading aloud every evening. In the opinion of the head mistress, girls are in more danger of growing up without literary taste now than they were when books were not so abundant and cheaply produced.

5. SCHOOL MANAGEMENT.

There is a head girl for each boarding house, and one for the day-girls. These are the heads of the school, performing certain duties week about, but always enjoying certain privileges. There is no corporal punishment. "Lines" are not set. There is practically no "keeping in." Fines are used for untidiness only. Punishment is not often used, the usual form is deprivation of certain extra pleasures.

A playground mistress, assisted by two or three others, is always present in the playground at games hours. At work there is always supervision. In the houses there is a head of each dormitory, and the girls are under the supervision of the housekeeper when getting up or going to bed. There is generally supervision in the play room.

Restrictions are set on the spending of pocket-money. The girls write shopping lists, which the house mistress sees. The girls never go into shops. Buying and selling, and borrowing and lending money, are forbidden. Hampers are not allowed, birthday cakes being the only indulgence of this kind. The girls have three regular meals a day, with light luncheon and supper.

The only "exeats" allowed are when parents come to stay in the place. Girls may then go to them from Saturday to Monday. Two or three girls at a time may pay visits to friends, unaccompanied by a mistress. Day-girls, except little ones, go about alone.

The school books are the property of the girls, but the school buys them back when done with, if in good condition.

APPENDIX.

The following papers of questions were circulated in 1899 among Preparatory School Headmasters, and on the replies received the greater number of the reports printed in this volume have been based :—

I. CURRICULUM.

1. What subjects are taught to all boys in the same form ?
Are they reclassified for—
 - (a) Greek ?
 - (b) French ?
 - (c) Mathematics ?
2. At what point do you begin Latin ?
3. Have you tried the experiment of teaching French before Latin ?
If so, with what results to boys' intellectual development ?
4. In teaching French (or German) do you adopt a method which as far as possible makes use of the foreign spoken tongue from the first and throughout ?
5. Do you substitute German for Greek in the case of boys destined for a modern side ?
6. At what point in the School Curriculum do you begin Greek (or German) ?
7. Are you in favour of postponing Greek till the Public School is reached ?
 - (a) For all boys alike ?
 - (b) For all except the clever boys ?In the latter case at what point would you begin Greek ?
8. Do you lay stress on the training of hand and eye and ear by teaching all boys—
 - (a) Drawing ?
 - (b) Carpentering ?
 - (c) Singing ?

9. Under the head of English what proportion of time do you devote respectively to—

- (a) Spelling and Dictation ?
- (b) Original Composition and Reproduction ?
- (c) Language (grammar, word-formation &c.) ?
- (d) Literature ?

10. Is elementary Science taught in your school ? State whether in the form of Object Lessons, Botany, Physics, &c.

11. Do you allow any boys to specialise with a view to preparing for Scholarship Examinations ?

If so, what change do you make in your time-tables in the case of these boys ?

12. Do you allow intervals of play between all your periods of class work and if so, how long are these intervals ?

13. What is the ordinary length of each class-lesson ?

14. How do you apportion the hours of work—

(a) On full working days ?

Before Breakfast.	Between Breakfast and Dinner.	Between Dinner and Tea.	After Tea.

(b) On half-holidays ?

Before Breakfast.	Between Breakfast and Dinner.	Between Dinner and Tea.	After Tea.

Appendix.

II. DIVISION OF HOURS OF WORK.

* * In filling up this Form please arrange that I. represent the *lowest* class.

[illegible]

1. NUMBER OF HOURS GIVEN TO LESSONS IN CLASS, EXCLUDING ALL PREPARATION.

[illegible]

2. PREPARATION.

[illegible]

3. NUMBER OF HOURS DEVOTED TO EXTRA (OUT OF SCHOOL) SUBJECTS.

Please asterisk *Optional* Subjects.

[illegible]

III. TEACHING OF HISTORY.

1. How much time is given to this subject? (a) In preparation? (b) In form?
2. What proportion of marks is allowed? (a) In the week? (b) In examination?
3. Is only English History taught, or Greek and Roman as well?
4. Do you use a text book and follow it closely, or supplement the text books by Geography and Drawing (i.e., wall map and blackboard), Lantern Slides, Relief Maps, Models? Any information as to the method you find best in teaching History will be valued.
5. Is the use of note books allowed, or compulsory?
6. Is it your practice to deal with large periods, broadly, or with shorter periods, in detail?
7. Is it your experience that the subject is a useful part of the Curriculum in (a) Strengthening the memory? (b) Quickening the intelligence of boys?

IV.—TEACHING OF MODERN LANGUAGES.

1. How many boys learn German?
2. Do all the boys learn French?
3. How many French classes are there?
4. How many hours per week are devoted to French?
 - (a) Preparation?
 - (b) Lessons?
5. Is French taught by a Foreigner or by English Teachers?
6. Is French taught conversationally?
 - (a) in Class?
 - (b) during Recreation?
7. Is special attention paid to pronunciation?
8. Do you make any use of Phonetics?
9. Do you employ any special method of teaching French, as—
 - (a) the Gouin method?
 - (b) that known in Germany as the "new method"?
 - or (c) do you teach French on the same lines as the Classical Languages?
10. What books do you use?
 - (a) For boys under 12—
 - (1) Grammar?
 - (2) Ex. or translation into French?
 - (3) Translation from French?
 - (b) For boys over 12—
 - (1) Grammar?
 - (2) Ex. or translation into French?
 - (3) Translation from French?

11. Is the time which you are able to devote to French in your opinion sufficient to produce a good result?
12. Should you wish to alter in any way your system of French teaching supposing that the entrance and scholarship examinations of Public Schools permitted?

V. TEACHING OF GEOGRAPHY.

1. Do you or your masters use any apparatus other than Text-books or Maps?
2. Do you consider Geography of educational value, and would you like to see it more largely taught?
3. At what hours is Geography taught in your school?

VI. SCHOOL LIBRARIES.

1. What class of books in your Library are most generally read?
2. Is the Library much used?
3. Do you place any restrictions upon the admission of newspapers and periodicals into the school?
4. Have you formed any opinion as to the effect produced upon a boy by the constant reading of weekly and monthly popular papers and magazines?
5. To what extent do you consider that literature expressly written for boys is desirable reading for them?
6. Do the boys receive any guidance in the selection of the books they read?
7. Do you exercise any control over literature brought into the school by the boys, or sent to them?
8. Is there any regular system of reading aloud to the boys? If so, what kind of books are read, and what is your experience as to the effect of this upon the boys?
9. Do you place any restrictions upon the books that may be read by the boys on Sundays?
10. Have you any reason to suppose that the literary taste of boys, as shown by the books which they select to read, is deteriorating? If so, have you any suggestions to make towards correcting this?

VII. ORGANISED OUTDOOR GAMES, SWIMMING, CYCLING, ETC.

1. Do you experience any opposition to compulsory games on the part of parents?
2. According to your experience, what fraction would fairly represent a single boy's annual risk of serious accident (such as the breakage of a bone) arising from compulsory games?
3. Similarly, what fraction would fairly represent his risk of other harm (such as serious illness) that could be fairly attributed to the compulsory games?

4. "The compulsoriness of games should be modified in favour of individual boys possessing pronounced tastes of an open air but non-athletic order, with a view to their development."

(a) Do you agree with this view?

(b) Do you find it possible to adopt it in practice (to the extent of one day in the week)?

5. Do you insist on out-door exercise for healthy boys in wet weather?

6. Do you allow paper-chases?

7. If you hold athletic sports—

(a) Are your prizes of a miscellaneous nature, or specially adapted for bearing inscriptions?

(b) What is the distance of your longest race?

(c) In your experience, does the successful runner of the Preparatory School maintain his relative superiority afterwards?

8. "As a general rule the Assistant Master in the Preparatory School devotes himself on four afternoons in the week to the supervision and advancement of its games."

Should you say that this overstates or understates the extent of his help in your school?

9. Do your Masters who supervise the game also

(a) Take the direction of them as Captains of the sides?

(b) Personally play in them?

10. How many hours in a week are devoted to

(a) Compulsory cricket?

(b) The games and practice of your better cricketers?

(c) Compulsory football (or hockey)?

11. How many matches (including return matches) do your boys play against other schools of the same class?

(a) In cricket?

(b) In football (and hockey)?

12. Do you employ a cricket professional?

13. What code of football rules have you adopted?

14. To which of the following rules do you incline (as referring to Preparatory Schools)?

(a) "The full benefit of cricket has been attained when boys play in the right spirit, and with sufficient skill to fully develop all the interests of the game."

(b) "Cricket, if worth teaching at all, should be taught with a view to develop the highest skill of which the pupil is capable."

15. Is it your personal opinion that athletic interests are stimulated to an unnecessary degree at our Public Schools and Universities?

16. If you have a heated swimming bath, what is its length, breadth, and minimum depth of water?

17. What percentage of boys leave your school unable to swim ?

18. Do you allow your boys

	During the hours of the organised games ?	At other times ?
(a) To play golf - -		
(b) To play fives - -		
(c) To ride - - -		
(d) To cycle - - -		

VIII. HEALTH AND PHYSICAL TRAINING.

1. Are cases of sickness in your school nursed in a sick room, in the school house, or in a detached sanatorium ?

(a) If in the latter, is the sanatorium reserved for infectious diseases only, or for all cases that require nursing ?

(b) For how long have you had the sanatorium in use ?

Should you say that you have found it easier during that time

(1.) To nurse illness ?

(2.) To check the spread of epidemics ?

2. (a) At what hour does school work end ?

(b) Is your last "school" preparation for the next day's work ?

(c) At what hour do the boys go to bed ?

(d) At what hour do they get up

In winter ?

In summer ?

(e) What do you consider the best hours for meals for boys of preparatory school age ?

(f) Do you have any school before breakfast ?

If so, for how long ?

And of what does it consist ?

(g) Does your experience lead you to suggest any special order in the subjects taken in the day's school work in order to lessen fatigue ?

e.g. What are the subjects which should be taken when the boys are freshest ?

(h) How long do you think a lesson should last ?

$\frac{3}{4}$ hour ? 1 hour ?

(i) What breaks do you recommend in morning work ?

(k) Are the boys employed under supervision during the whole of their day ; either in work or organised amusements ?

Or do they have times of leisure when they can do as they please ?

IX.—SCHOOL MANAGEMENT.

1. Do you assign any powers, responsibilities, privileges, to the Head of the School or to any other members?
2. What forms of punishment do you adopt?
 - Do you resort to corporal punishment, and, if so, for what kind of offences?
 - Do you impose any limits on "keeping in"?
 - Do you set "lines"?
 - Do you use fines?
3. What supervision is exercised by the Masters—
 - (a) Out of doors, at games, and at times of leisure?
 - (b) Indoors, at work, at times of leisure, in dormitories?
4. Is there any extra coaching for specially clever or dull boys?
5. Do you exercise any restriction on the amount of a boy's pocket money, or on his spending of it?
 - Have you a boys' bank?
 - Do you give boys a weekly allowance?
6. Limits of liberty allowed to boys in different parts of the school:
 - Are they always under supervision?
 - In view of the almost unrestricted liberty allowed in some of the Public Schools for which you prepare, do you allow any boys to take country walks alone?
7. Do you allow "excats," and, if so, under what restrictions?
 - Do you think them—
 - necessary?
 - desirable?
 - Have you any method of enforcing punctual return?
8. Do you impose any restrictions upon buying and selling among boys?
 - What rules have you as to borrowing and lending money?
9. Are the school books the property of the boys or of the school?
 - What about the destruction of books?
10. What kind of desks have you found best?
11. Do your Masters wear cap and gown?
 - Have you any rules as to their smoking among the boys?
12. Have your boys any special dress for summer or winter?
 - What do you consider the ideal dress for young boys?
 - Do you insist on their changing into flannels for games?
13. Have you a school "grub shop"?
 - Do you allow boys to go to such shops outside the school, and under what, if any, restrictions?
14. Are hampers allowed?
 - What number of meals do you consider necessary?

X. EQUIPMENT.

[The Headmaster was asked to send with his answers the Prospectus of the School.]

A. SCHOOL.

1. (a) Number of boys in school on June 1, 1899?
 (b) Average age of boys at entrance?
 (c) " " " leaving?
 [If there are any girls in the school please show the numbers separately.]
2. Is the school for boarders only, or for day boys only, or for both?
 If for both, what are the present numbers (June 1, 1899) of day boys and boarders respectively?
3. (a) Number of Forms?
 (b) Number of boys in $\left\{ \begin{array}{l} \text{Largest Form?} \\ \text{Smallest Form?} \end{array} \right.$
4. Are the school books the property of the boys or of the school?

STAFF.

5. (a) Number of Teaching Staff $\left\{ \begin{array}{l} \text{Masters?} \\ \text{exclusively attached to} \\ \text{the school} \end{array} \right. \left\{ \begin{array}{l} \text{Mistresses?} \\ \text{Masters?} \\ \text{Mistresses?} \end{array} \right.$
- (b) Number of Visiting Teachers $\left\{ \begin{array}{l} \text{Masters?} \\ \text{Mistresses?} \end{array} \right.$
- (c) Graduates of Oxford?
 " Cambridge?
 " other Universities?

B. HOUSE.

1. Number of class rooms?
2. In planning class rooms, how many square feet would you advise to be allowed for each boy?
3. Number of bedrooms?
4. In planning a school boarding-house, does your experience lead you to recommend separate cubicles or bedrooms containing a number of open beds?
5. In sleeping rooms, how many cubic feet do you think should be allowed for each boy?
6. If you recommend bedrooms with open beds, instead of cubicles, what does your experience lead you to advise as the maximum number of beds which should be allowed in any room?

C. OUT-DOOR.

1. Extent of play-ground?
2. Have you a sanatorium?
 Is it detached?
3. Have you a school chapel?

4. Have you a gymnasium, covered or open ?
Instructor, resident or visiting ?
5. Have you a school swimming bath, heated ?
Instructor ?
6. Number of fives courts ?
„ lawn tennis courts ?
7. Have you a carpenter's shop for manual instruction ?
Instructor, resident or visiting ?
8. Have the boys gardens ?

NOTE.

Suggestions on any of the following points of Equipment will be welcomed :—

- (i.) Methods of lighting—Gas ? Oil lamps ?
- (ii.) Methods of ventilation of school rooms and bedrooms.
- (iii.) Methods of warming—Open fires ? Hot-water pipes
- (iv.) Does your experience lead you to recommend any special forms of sanitary arrangement ?
- (v.) Is it advisable to have separate rooms for—
School library ?
Music room ?
Museum ?
Play room ?
- (vi.) If you have a school museum, is it confined to natural history collections ?
Is it much used ?
Do the boys help to manage it
Is it useful as a collection of objects for use in various lessons on natural history ?
geography ?
history ?
- (vii.) School desks ? Should they be single or continuous ?
Fixed or reversible ?
Should each boy have a private cupboard for books and other possessions ?
- (viii.) Do you use a lantern for illustration of any lessons ?

XI.—PREPARATORY SCHOOLS UNDER LADY PRINCIPALS.

1. How long has your school existed?
2. How many boys have you?
3. At what age do you receive boys?
4. Up to what age do you keep them?
Do you keep them generally, or ever, till they pass on to a Public School? Or do you usually send them on to some other Preparatory School kept by a Master?
5. Do you admit girls, as well as boys, to your school?
If so, how many pupils have you in all?
6. How many Assistants have you?
(a) Exclusively attached to the school—
 (i) Men? (ii) Women?
(b) Visiting Teachers—
 (i) Men? (ii) Women?
7. Do you keep in your own hands, or delegate to a Master, the chief authority
 (i) Educational?
 (ii) Moral and Disciplinary?
8. What provision do you make for games?
9. Have you formed any opinion as to the most valuable kind of training for the work of teaching in a Preparatory School?
 Would you have it include a theoretical, as well as a practical side? If so, in what subjects?

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[Introductory letter to Vol. 7 of the Series.]

To Sir G. W. KEKEWICH, K.C.B.,
Secretary of the Board of Education.

SIR,

I HAVE the honour to present to you the accompanying volume of Special Reports descriptive of the work of rural elementary schools in some of the northern and north-western parts of France, with particular reference to the nature and effects of the instruction given in subjects bearing upon agriculture.

In many parts of the world the question of country schools is one of special interest and difficulty at the present time. There is a widespread feeling that something ought to be done to bring them into closer touch with the practical needs of country life. But opinion is greatly divided as to how this could or should be done. The question is felt to be in the main a social and economic problem, not simply a school problem. The work done in the schools affects the question at issue, but no mere change in school programmes could arrest or reverse a great process of economic or social change. Perhaps I may be permitted to sum up in the following paragraphs, for the information of readers of this report (with a brevity which will, I trust, not be mistaken for dogmatism), what appear to be the conclusions of many of those best qualified to form an opinion on this intricate but urgent question.

The country school is in a position to render a great service to the nation. The country districts are the recruiting grounds for the towns. Urban communities have a direct interest in the welfare of the rural schools. The better training that is given to the boys and girls in the country schools, the better will it fare with the industries in which those boys and girls may be engaged in later life. Moreover, it is hoped that the drift into the great cities may some time be reversed, and that a current of population will pass out from the great cities into the country districts again. Electric traction, electric power, rapid means of communication, and the growing congestion of many city areas may cause a greater decentralisation of industry. In order to encourage such a movement back into purer air and more open surroundings, it is desirable that the country schools should not be allowed to drop below the intellectual level of the town schools. We have now, and have always had, many very excellent country schools which may serve as a model for imitation. What is wanted is to level up the average to a higher standard.

Education is a much greater and more difficult thing than the mere imparting of intellectual instruction. A good school

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makes the children think; it makes them interested in what lies around them; it makes them ask questions; it makes them keen. It does not cram them with undigested knowledge. It trains them to think for themselves; it teaches them how to learn; it makes them want to learn; it interests them in the why and the wherefore of the common details of life; it makes them realise that the simplest questions are often the hardest questions, and that the simplest things are often the best. But a good school does not stop here. It trains the body as well as the mind, and it cares most of all for character. Its deepest and noblest work is a moral work. It makes the children not simply brighter and cleverer, but better, than they were before. It aims at producing not only self-reliance but self-control and readiness to sacrifice selfish interests to duty.

It cannot do this, however, unless it is inspired by a strong and noble tradition. All good education involves sacrifice. And the essential things in a good school are not a well-chosen timetable or skilful organisation (though both are necessary), but the personality and example of a good teacher. That is the force which makes the school. And, in order to attract the best men and women to the work of education, no pains should be spared to make the position of schoolmaster and schoolmistress as honourable and as well-found as possible. We need schools of first-rate quality and in good heart. This can only be when the teachers are the best, and when they are happy in the conditions of their work.

It is useless to turn a school into a mere labour-house. Men and citizens have to be trained, not only workmen and "hands" for employment. But the best education combines what is practical with what is ideal. It does not overlook the economic future of the pupil in attempting to safeguard his spiritual and intellectual future. The best schools teach the children to value and reverence what is near at hand and "common," as well as what is distant and rare. But no school can flourish which aims at keeping the scholars down, or back from the best at which they can aspire. It should always be remembered that in times past many of our greatest scholars and leaders were bred as lads in country schools.

A few, at all events, of the children in a country school are likely to earn their living in some calling which is not very closely connected with country life. It would be inexpedient, therefore, to omit from the course of study in such schools the elements of that education which is necessary as a foundation for success in commerce or industry. Still less reasonable would it be to model the curriculum on the assumption that every boy in a country school will be, or ought to be, an agricultural labourer. It is partly as a safeguard against any such assumption being made that the literary elements in the curriculum have tended to oust the practical elements. Most people will agree in thinking

it right that the elements of a liberal education should be given in all schools, urban and rural alike, but that, in all cases, an education need be none the less liberal for being given partly through the medium of practical studies. At the same time there is a no less general conviction that, even in the remotest village school, the desire to keep labourers "in their place" should never be allowed to encroach on the proper claims of a liberal training.

The elementary school seems not to be the place for [the technical study of agriculture in any specialised form; but the general influence of the school and the drift of its work may do much to foster, or to discourage, an interest in country life. Some generations ago it was the practice to sacrifice elementary education to the claims of industry. There followed a sharp reaction, and a too violent recoil from practical studies in the elementary schools. Happily there is now an increasing disposition to regard literary and practical studies as compatible elements in education. Perhaps the most effective of all kinds of rural education is that which combines the practical with the more literary elements, and which teaches a child to love nature and to admire skill in handicraft, while at the same time making him share in the great inheritance of moral ideals and noble literature. But such a training, though it sounds simple, is really the outcome of long study on the part of the teachers, coupled with practical skill in the selection of subjects and in the choice of methods in teaching them. Children learn to love a subject through learning from a teacher who loves it. The best country schools have always been those which are taught by teachers who love country life, who appreciate its beauty and varied interest, who themselves prefer to live in the country than in the town, and who are in every way the intellectual equals of their colleagues in the town schools. The country is the ideal place for the education of children, and the greatest efforts should be made to keep the country schools up to a high level of educational efficiency, enthusiasm, and equipment. Country teachers need special encouragement in their work and many special opportunities for keeping up their studies. They need books, pictures, opportunities of travel, opportunities for cultivated intercourse. Above all, they need to feel that the nation at large appreciates the immense importance of their task, and honours them for their patience in overcoming the difficulties which beset it. No part of the national system of education needs, or will repay, more systematic encouragement or more constant care.

In France there has been during recent years a remarkable movement for the improvement of the rural schools. A sort of missionary enthusiasm for national education through republican institutions has inspired the leaders of this reform. And it is generally acknowledged how much of the moral earnestness of the movement is due to the labours and example of Professor

F. Buisson, now Professor at the Sorbonne, but formerly Director of the Primary Branch of the Ministry of Public Instruction. In view of the practical importance of the subject, it has been felt that a short account of what has been done in France will be of interest to many English readers; and that, though direct imitation of a foreign system of education would be fruitless, even if it were practicable, there is much that is suggestive and encouraging in parts of the French experience. The political and economic conditions in the two countries are, however, so very different that in very many respects French precedents would be as unfitting to English circumstances as English methods of adjustment and compromise would be distasteful to the genius of French administration, with its dislike for half lights and its insistence on logical distinctions.

The reports which follow are from the pens of two writers who have made a long and careful study of some of the aspects of rural education, and who are well acquainted with the difference between French and English life. Mr. Medd, as an active member of the Executive of the Agricultural Education Committee, and Mr. Brereton, as Vice-President of the Jury on Primary Education at the Paris Exhibition of 1900, have had excellent opportunities of coming to close quarters with the practical problems connected with the welfare of country schools. In the course of the inquiries upon which the following reports are based, they met with the most courteous welcome on the part of the educational and other authorities in France, and received the greatest kindness and assistance from all concerned in the welfare of the schools. On behalf of the Special Inquiries Section of the Board of Education, I desire to associate myself with the writers of the reports in their expression of hearty thanks for the consideration and friendly interest with which they were received.

To each report is appended the name of its author, and it should be understood that the latter alone is responsible for the opinions therein expressed.

I have the honour to be, Sir,

Your obedient servant,

MICHAEL E. SADLER,

Director of Special Inquiries and Reports.

December, 1901.

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The Rural Schools of North-west France - - -

By Mr. Cloudealey Brereton, M.A., L. ès Lettres, Vice-President of the Jury on Primary Education at the Paris Exhibition, 1900; Temporary Inspector to the Intermediate Education Board for Ireland.

Rural Education in France - - - - -

By Mr. John C. Medd, M.A., Member of the Executive Committee of the Agricultural Education Committee.

For contents of earlier volumes of Special Reports, see pp. 311 *et seq.*

1. Introduction

The purpose of this study is to investigate the effects of various factors on the performance of a system. The study is organized as follows: Section 2 describes the system and the factors being studied. Section 3 presents the experimental design and the results of the experiments. Section 4 discusses the implications of the results and the conclusions of the study.

The system under study is a complex system with many interacting components. The factors being studied are the input variables that affect the system's performance. The experimental design is a factorial design, which allows for the study of the main effects and the interactions between the factors.

THE RURAL SCHOOLS OF NORTH-WEST FRANCE.

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THE RURAL SCHOOLS OF NORTH-WEST FRANCE, WITH SPECIAL REFERENCE TO AGRICULTURAL TEACHING.

INTRODUCTION.

A course of education, in any grade of school, is rightly regarded as a whole, made up of many ingredients, nearly all of which are closely inter-related. But there has been a tendency, especially noticeable in England, to ignore this essential unity of any course of education, and to regard the latter as a more or less fortuitous aggregate of subjects practically independent of one another. Happily this way of looking at the matter is much less common than it used to be. One of the indirect benefits of the Technical Instruction Acts has been to open people's eyes to the fact that technical instruction cannot be tied down to mean the teaching of one or two strictly industrial subjects. The wide extension given to the term by responsible Government officials is due to the reason that the experiment has brought to light the vast ramification of knowledge that lies at the root of every truly scientific training, and the interrelation between different subjects that had hitherto been regarded as more or less distinct. From the recognition of the universal kinship among subjects to their formation into well-defined families or groups was an easy step. The creation of Schools of Science, the Block Grant for Elementary Education as a whole, and the latest division of the new Board of Education into sections representing distinct groups of Instruction, have brought us a long way on the road of looking on processes of education in the various grades as entities more or less complete in themselves, rather than fortuitous concurrences of subjects that custom immemorial had sanctioned, or some specialist craze had squeezed into the "indigesta moles" that formerly passed in some cases for the school time-table.

This unification of grades and groups in Education to which we seem to be tending has long been an accomplished fact in France. There the province of each type of school has been clearly, and maybe in some cases too rigidly, thought out and defined. This is due, perhaps, in part to the French habit of tackling administrative problems in a more philosophical spirit than our practical English minds are accustomed to. The one starts with a pattern; the other makes its pattern as it goes along. Be that as it may, the definition of each grade or group inextricably involves the thinking out of its own particular aim. And so the practice grew up comparatively early in French Primary Education of asking what type of individual the Primary or Higher Primary School ought

to produce, and then framing or adjusting the programme of studies to meet the new requirements, so that the numerous additions and modifications that have from time to time been introduced into the school system have nearly always been proposed, not so much with an idea of favouring the teaching of this or that particular subject because of its individual merit, as of remodelling the whole curriculum by the inclusion of a new element like *la morale* in order to respond to some freshly discovered want that the authorities have felt or admitted in the aims of the school. They have not proceeded on the piecework and patchwork principle of tacking yet another 'ology on to an already overburdened curriculum, but even when such an apparently isolated subject as *l'enseignement agricole* has been admitted, they have at once tried to locate it, and have never rested till they have fitted it into the curriculum, altering and adapting the latter wherever it was necessary in order to render the integration and assimilation complete.* Thus the whole course of studies is modified and leavened by this new element, which thereby brings it more in accord with a fresh and fuller conception of the aims of the school.

It is therefore imperative for an inquirer into agricultural education in rural schools in France, if he wishes to judge impartially of its effects, to do his best to regard the question from the same standpoint as its originators; that is, he must begin by acquiring a sufficiently complete knowledge of French Primary Education in order to see where the particular part fits in with the working of the whole, just as one must acquire an adequate notion of the general structure of any engine in order to appreciate the true function and economy of any particular piece of its mechanism. But when one has further to enquire into the "educational influence" of the rural school, it is clear that this subsidiary knowledge of the system as a whole now becomes one of the main objects of investigation, for agricultural instruction, which is only a part, is clearly inadequate to explain the entire function of the school in the country. Hence, therefore, while only a few words on the central authorities are necessary, it is essential to obtain a fairly clear idea of the work of the school, the teachers, and the local authorities. These, in the main, are, fortunately, fairly easy to describe, thanks to the uniformity that a strong centralisation always produces—uniformity which is currently regarded in England as an absolute rule in French education, and possesses, in this case, the exceptional advantage of allowing frequent comparisons of the schools in the departments under observation with those of France as a whole.

Yet, here a word of warning is necessary. This uniformity, which seems so universal, appears singularly modified on a nearer acquaintance. We are so apt to forget that education is a thing whose mechanism is not built up out of lifeless elements,

* Divers en ses applications, l'enseignement de l'école est un en son principe. M. Doliveux in the *Revue Pédagogique* for October, 1900, page 363.

but composed of creatures of flesh and blood like ourselves. That is to say, the working and efficiency of the machine in such cases depends essentially on the abilities, energy, and skill of those who make up the administration. In a word, however excellent the administrative system may be on paper, the real driving power comes from the character of the *personnel* which compose it—in this instance, the officials, the inspectors, and the teachers. And since men differ more or less, and some are prone to lay greater stress on one part of the programme than another; since even the same rules and regulations depend for interpretation on the spirit of those who administer them; since some regions in France seem to be inhabited by more vigorous and industrious races than others, there exists underneath the outward and visible appearance of rigid uniformity no inconsiderable amount of variety and difference. That it might be greater still would, no doubt, in some cases be an advantage. But the actual diversity is so great that anyone who had not really visited a sufficient number of typical departments among the eighty-six of which France is composed would be certainly rash in always drawing wide and sweeping conclusions about the state of things in regions other than he had visited, especially as each department seems to possess, as far as education is concerned, its own physiognomy, a subject to which later on reference will be made.

Nor must it be forgotten, as many critics of schools forget, that the school, although one of the chief factors in education, is only one of three others almost equally important—the home, the social *milieu*, and the religious influences*. We must therefore, in an enquiry into the position and educational influence of the rural schools in France, not heedlessly ascribe everything to the school, whether good or ill, but try to discriminate to a rough extent the effects of other factors at work; and this leads us straightway into an inquiry into the social and economic forces which seem to be affecting French country life to-day. Everywhere in Europe the centripetal force of the towns appear to be growing. Does the French rural school exert its influence in favour of town or country? What is its influence, measured in terms of good or evil repute, among the peasants? Is there a rural exodus, and if so, what are the general effects on this exodus, of higher wages in the towns, of declining population, of alcoholism, of protection, of taxation, of land tenure, of conscription? Is the school a centre and

* Since writing the above I have come across Mr. Sadler's monograph on "How Far can we Learn Anything of Practical Value from the Study of Foreign Systems of Education?" "Education is not," to quote his own words, "a matter merely of schools and school-rooms. Surely what we in England really mean in our hearts by education is that great aggregate of the influences which come to us in our homes, at church and chapel, in daily life, in intercourse with our contemporaries, in love of home and father and mother—in all the thousand streams of influence and suggestion which in a free country converge upon each individual life and shape ideals of conduct."

rallying point of all social reform, or is it merely content to interpret its duties in the narrower sense of instruction pure and simple?

In fact, it is only when we have formed a certain idea of the relative function and importance of each of these different factors that we can disentangle from the social and economic life of rural France in a rough and approximate fashion the actual influence and value of the school in the country and venture to draw any general conclusions about its work, and hazard a few suggestions in the way of application to English education—suggestions which must practically be limited and confined to details; for when the two educational machines are so unlike as those of English and French primary education, it is obvious that only what in engineering are called “interchangeable” parts can be with success adopted or adapted.*

The materials of which the present report is composed are practically derived from two sources. One consists of a large number of official documents, bulletins, etc., and more especially of the four fine volumes published by the Ministry dealing with the statistics, the organisation, and the reports of Inspectors and Academy Inspectors of Primary Education, which every student of the subject should read. The other source is derived from a large body of notes which represent in its briefest form the summary of long conversations with over 100 persons during a tour of some 600 miles (more than 300 of which were “en bicyclette”), made last spring through the five Departments of Calvados, Orne, Sarthe, Indre-et-Loire, Loir-et-Cher. The tour extended over a period of five weeks, during which the writer visited some 60 primary schools for boys and girls, as well as nine normal schools. Among the persons interviewed were two rectors, the five academy inspectors of the departments, three secretaries to the academy inspectors, fourteen inspectors, the heads and some of the staff of the nine normal schools, four professors of agriculture, some 60 teachers, and a certain number of peasants, parents and boys, and inhabitants of the country in general. On his return to Paris he had further long conversations with the members of the official world, and especially with his French colleagues on the Jury for Primary Education, which contained, among others, a former Minister of Public Instruction (M. L. Bourgeois), the past and present heads of Primary Instruction (M. Buisson and M. Bayet), the Comte de Fontaine de Resbecq, former Under-secretary of Primary Instruction and representative of the *écoles libres*; several heads of departments (M. Charlot and M. Fougère), and “inspecteurs généraux” M. Jost and M. René Leblanc (the “godfather” of agricultural education in France); M. Bédorez, the Director of Education in Seine; M. Baudrillard, Primary Inspector; Madame Chegarey, the head of the higher primary school Sophie

* Cf. M. Sadler, *op. cit.*, page 18, on this question.

Germain; and the late M. Achille Deum* and M. Comte, the teachers' representatives.

Among the schools visited were several belonging to the religious orders. "*Le mieux est toujours l'ennemi du bien*"; and while the writer was always courteously received, he experienced in more cases than one considerable difficulty in obtaining permission to visit individual schools, especially those for girls, despite the credentials he carried, which included a general letter of introduction kindly furnished by His Eminence Cardinal Vaughan. Even when permission was obtained, there were further delays. "*Il faut prévenir*" was a not infrequent expression, and the idea that his visit was being carefully prepared for, despite the honour that was perhaps therein intended, contrasted most unfavourably with what was met with in the case of the *école laïque*. This was all the more unfortunate as the religious schools of Paris, or at all events those of the *Frères de la Doctrine Chrétienne*, seem to be easily accessible to foreign visitors.

As it seems rather too formidable a task to draw up the bead-roll of persons to whom thanks are due, since it would contain at least some 120 names, perhaps the simplest task to adopt is to place on record here the admirable reception that the writer met with everywhere, and to insist especially on the frankness and freedom with which officials of every grade debated with him the weak and doubtful points in the system with all that tact and nice sense of give and take that render a discussion with any cultivated Frenchman so attractive and instructive. It is, indeed, highly remarkable that a system round which the fiercest light of polemical strife has played should not merely permit, but invite and even encourage criticism. Surely we have here what can only be regarded as a very healthy sign. On the one hand it implies that sense of strength which can only come from the consciousness that when one has written off all doubtful assets and written down everything to its lowest value, there still figures on the balance sheet a solid reserve of merit to draw on. On the other hand, it typifies under its best and most living form the spirit of progress ever on the alert to better itself, counting, as it were, the present gain but loss in its strenuous effort to improve and keep the school abreast of the wants and aspirations of the age.

* Perhaps it is permissible here to express one's profound regret at the sudden death of M. Deum. It came as a painful shock to one who recalled his boundless energy and unflagging spirits of a year ago. His wide sympathies, his unfailing tact, his sound judgment, his rare sense of justice, his frank independence, and his absolute unpretentiousness won for him the regard of his superiors, and endeared him to all his foreign colleagues. France is poorer to-day by the loss of one who was not only the beau idéal of a teacher, but also the exponent of many of the best national traits.

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NOTE.—There is an excellent series of bibliographies appended to each of the chapters in the *Rapport, E. P.*, above.

HISTORICAL SKETCH.

Up to 1789* Primary Instruction in France was looked on as a religious work† (*œuvre pie*), and was mainly in the hands of the Christian Brothers. The notion of considering it as a branch of National Education that society was bound to encourage and maintain existed only in the minds of a few philosophers. The Constitution of 1791 declared in favour of the creation and organisation of a public system of instruction common to all citizens, and gratuitous for such parts of instruction as are indispensable to all men. It further decreed compulsory attendance and the liberty of teaching. All this legislation remained a dead letter owing to the wars in which the Convention became involved. Napoleon centralised all existing forms of education in the university. The right to teach was, however, conceded to the Christian Brothers, subject to the leave of the University. Furthermore, all schools were compelled to adopt as base of their instruction the precepts of the Catholic religion. Under the Restoration a keen struggle was waged between the partisans of the rival systems of mutual and simultaneous instruction. The champions of the latter, the Frères de la Doctrine Chrétienne, who remained faithful to the teaching of their illustrious founder, de La Salle, re-opened their schools.‡ Their superior pedagogy told in the long run. The mutual system of instruction was ousted, and schools were closed.

The first great era of reform in French primary education begins with the July monarchy. After taking a preliminary census of the stock of educational machinery in the country, which thereby revealed the nakedness of the land, M. Guizot, laid in 1833, the foundation of the present system of elementary and higher primary education. There was no compulsory attendance. Each commune was, however, obliged to maintain a school and pay the teacher, who also received the children's fees. Free education was to be provided for the children of the indigent only. The religious element was maintained by the retention of the *curé*, or *pasteur*, as a member of the local committee of management. An *ordonnance* prescribed in 1836 the foundation of girls' schools. The inspectorate was organised by the appointment of one inspector to each department. Normal schools were founded, and amounted to 84 in 1848. The liberty of teaching (*i.e.*, of opening a school) was secured and regulated by the law of 1833 (Gobron). The result of these reforms

* See Rapport E. P. Introduction historique, page 2.

† For a fuller account of the "origines" of Primary Education in France, and particulars of private initiative before the Revolution, see Report M. A., pages 18—25, and for after that period, L'Enseignement Primaire Catholique Histoire-Législation, 1789-1900, by M. le comte de Fontaine de Resbecq.

‡ Official Statistics, page ccii.

is best denoted by the fact that in 1827 the number of illiterates among the conscripts was 58 per cent., while in 1847 it had fallen to 36 per cent. The Second Republic, under the influence of the Prince President, passed in 1850 the law Falloux. It suppressed the higher primary schools by ignoring them in its list of the various forms of primary education, and drew up a new programme for Primary Education, which consisted of the three R's and religious instruction. Among the optional subjects elementary instruction in agriculture was mentioned for the first time. It recognised two new sorts of schools—the public schools maintained by the communes, and the private ones founded or maintained by private individuals or religious associations. Teachers were to be properly housed, and provision was made for starting girls' schools in communes of over 800 souls, and for the creation of classes for adults, and professional training for apprentices. *Conseils académiques départementaux* were started to supervise all grades of education. In 1854 France was divided into 16 academies (universities to-day), each administered by a rector with an academy inspector under him for each of the departments in his *circonscription*. The *conseils académiques* disappeared. New bodies, dealing only with Primary Education—*les conseils départementaux*—were created. The nomination of the teacher was transferred from the rector to the prefect.

The ministry of M. Duruy (1865–1869) is another landmark in the history of French Primary Education. In three years he raised the classes for adults from under 4,000 to 32,383, containing 829,555 pupils. Teachers' salaries were improved; primary schools for girls in communes of over 500 souls were rendered obligatory; free schooling could be adopted at the option of the commune; hamlet-schools were created, and departments obliged to come to the aid of necessitous schools. He further encouraged the creation of *caisses des écoles*, whose receipts should be utilised for improving the attendance by prizes, and by relief allowances to indigent children. The fruits of this liberal *régime* are best seen from the following figures. The number of schools which in 1850 stood at 60,579, in 1866 had reached the total of 70,671. The pupils who in 1850 were a little over three millions and a quarter, amounted to more than four millions and a half, and the percentage of illiterate conscripts had fallen to 23 per cent.

When the history of the first 30 years of the Third Republic is written some hundred years hence, it will probably be admitted on all sides that its most permanent and enduring work is the reorganisation and re-creation of the system of Primary Education in France. The first law of importance is that of June 1st, 1878, which imposed on the communes the necessity of acquiring their school buildings. The State at once set aside the sum of £2,400,000 as a grant-in-aid for this purpose, with a like sum for loans, which was applied for "the construction, reconstitution, and fitting up of these schools." Further grants on a still more munificent scale

followed. The magnitude of the reform is best seen from actual figures. From 1878 to 1897, 35,145 maternal or primary schools and 163 normal schools have been built or acquired, and 19,817 have been fitted up and furnished. In all, the central and local authorities together have spent alone under this heading £34,000,000. In 1879 a law was passed compelling every department to maintain a training college for male and female teachers respectively. This law has now been practically carried out, and France possesses to-day, if anything, too many normal colleges. The two superior normal schools of Fontenay (1880) and St. Cloud (1881-2) were also founded in order to supply the normal schools with professors. During the same period a large number of *certificats* or professional diplomas were established, notably the *certificat d'aptitude pédagogique* for probationers in teaching, the *certificat d'aptitude* for primary inspectors and the heads of normal schools, and a *certificat d'enseignement agricole*. Still more important is the law of the 16th June, 1881, which rendered obligatory for all teachers, whether public or private, the *brevet de capacité*. The fruits of this law are evident to-day. In 1877 there were 41,712* teachers without the *brevet*. According to the statistics of 1897, they number only 9,181,† and of these a large number are in the kindergarten schools, which were not comprised in the census of 1877.

Having set the school buildings in order, and raised the profession of the teacher to that of a skilled profession, the Republic turned its attention to the carrying out the triple reform with which the name of Jules Ferry is indissolubly associated—abolition of fees, compulsory education, and laicisation of the schools. The law of June 16th, 1881, abolished all payments in kindergarten, primary, and normal schools. This law on free education naturally paved the way for compulsory education. It furnished, in fact, one of its arguments. "It is just," said the Rapporteur on the Bill to the Senate, "to render accessible for all what is rendered obligatory for all." The law on compulsion, which dates from 1882, established compulsory education, not compulsory attendance. Parents might send their children where they pleased, or even have them instructed at home. The liberty of ignorance was alone proscribed. School attendance commissions were to be appointed in every village to draw up lists of children under the Act; and in case of non-declaration on the part of the parent in favour of any school, the child was to be inscribed on the list of the village school. To provide funds for the encouragement of attendance, the *Caisse des Écoles*, which has been already mentioned, was rendered obligatory for all the communes. The legal institution of the *certificat d'études*, or leaving certificate, also belongs to this period.

These two reforms, drastic as they were, were, however, nothing in comparison with the third law of October 30th, 1886, which decreed the laicisation of the schools, and cut the painter once and for all

* France.

† France and Algeria.

between the public and private schools, between the State and the different cults. The laicisation was to be established in two fashions. The school programme was to be purged of all denominational teaching distinctively Roman Catholic, Protestant, or Jewish, the teaching of *la morale* being put in its place. A large number of the State schools were under the direction of the *congréganistes*. In the boys' schools these persons were to be displaced by a lay *personnel* within the space of five years, but the *religieuses* at the head of the girls' schools were to be left in possession till their death or resignation. On the other hand the new law confirmed the principle of the liberty of teaching. Article 35 left to the directors and directresses in private schools entire liberty in the choice of their methods, programmes and books, reservation only being made in favour of the State's right to prohibit the use of such books as are contrary to morality, the constitution, or the law. These schools are subject to inspection, but only as regards morality, hygiene, sanitation, and the carrying out of the duties imposed on teachers by the law of March 28th, 1882. Certain formalities were also laid down for the opening of any new private school. Higher primary schools were once more recognised. The right to appoint teachers was reserved to the prefect as before, but his power is limited, by the fact that the right of proposing candidates rests with the academy inspector. The same law regulated the jurisprudence to be employed in the case of offending teachers, and with this idea the *conseil départemental* was remodelled in order to give the pedagogical element the majority.

These reforms necessitated a certain number of financial changes that took place in 1889. The financial burdens shared between the State, the department, and the commune were simplified and defined. Up to this date public teachers had been paid by the proceeds of a surtax on each commune, the law only having fixed a minimum.* Henceforth they are paid direct by the State, and only receive certain allowances and extra grants from the communes in certain cases. Under the present arrangement, therefore, the State pays the salary of all functionaries, and bears, in addition, the cost of the *élèves-maitres* in the normal schools.

The department has to maintain the normal schools (fabric, furniture, and teaching materials); it has also to meet a few minor expenses, such as an *indemnité* to inspectors of 300 francs. The commune must keep in good repair the school buildings, with the master's house, pay for heating and lighting the class-rooms, find the wages of the *gens de service* (where they exist), support the cost of the acquisition, maintenance, and renewal of school furniture,

* According to the official report (E.P.), the situation was far from satisfactory. The poor communes could hardly pay their teachers the minimum wage. The rich communes often made a large addition to the legal salary. "These liberalities possessed the disadvantage of creating veritably startling inequalities between teachers in the same department and the same canton, and managing schools of equal importance" (page 176).

including the registers, etc., allow the teachers "lodging money" where no proper house exists, and an *indemnité de résidence* in all cases where the village population is over 1,000, and pay for the sewing mistress in mixed schools under a male teacher. The same law which made the payment of teachers a State affair established a regular scale of salaries for teachers and probationers, by dividing them up into six classes. Promotion is therefore no longer a question of locality.

In 1893 probationers' salaries were raised to 900 francs. In 1900, the question of teachers' salaries having come once more to the front, the number of *stagiaires* was reduced, and the percentage in the higher classes augmented, in order to accelerate the rate of promotion. Meanwhile, the school programme has undergone numerous revisions. The need of bringing the school more into practical relation with everyday life has led to several important modifications. Yet the ideal aim of the school has never been sacrificed. M. Bayet says in an eloquent preface to the latest report on Primary Education: "Nous poursuivons la culture générale du caractère et de l'esprit, mais nous cherchons en même temps à orienter l'enfant vers la vie pratique." The most notable of these changes are the attention given to manual training in the towns, and to the teaching of agriculture in the country.

The work of the Third Republic may be briefly resumed under the heads of free education, compulsory attendance, and laicisation of the schools, simplification and adjustment of the cost of education between the three contracting parties—the State, department, and commune—generalisation of primary education by the construction or maintenance of a public school in every village, with a marked improvement in school furniture and equipment, thanks to the generosity of the central authorities; teachers' salaries raised and teachers themselves paid directly by the State, while everywhere training colleges have been provided in abundance. At the same time the instruction given has been rendered at once democratic by the teaching of "civics and *la morale*," and practical by the introduction of manual training and agriculture; and lastly the higher primary school—which is the natural crown to a primary education—has been successfully re-established. The bitterest enemies of the Republic must admit that, however short it may have come of carrying out the extensive programme of reforms proposed by the Convention, it has been singularly successful in realising, for good or ill, the educational ideals traced out by Condorcet a hundred years ago. In the respect of the progress effected during the last 20 or 30 years, the following statistics are given in the official catalogue to Class I. of the Paris Exhibition. In 1897, there were 41,568 teachers more than in 1877;* the children have increased to the extent of 1,012,052, and now amount to 6,326,324 pupils (of whom one quarter are in the religious schools). In 1877, 15

* The number in 1896-7, in all grades of primary schools, was 158,872.

per cent. of the conscripts were illiterates, in 1896 there were only 5·3 per cent.*; and finally the total of pupils who passed the *certificat d'études* has risen from 36,841 in 1877, to 186,031 in 1897.

And lastly, the school, interpreting for itself the idea of national education not merely as a matter of programmes and syllabuses, or even the mere training of the youth during the narrow cycle of the school life, but as a work whose sphere includes the education of pupils of all ages, and embraces in its widest sense the bringing forward and uplifting of the masses, has thrown itself with extraordinary ardour into the field of education extension and social regeneration. The official world has indeed given its consent and even approbation and encouragement; but the real living force behind the movement has come from the teachers themselves, who have spared neither their own time nor themselves in their efforts to found continuation classes for ex-pupils and adults, to provide evening recreation and amusements, and to encourage thrift and mutual assurance among their pupils, form old boys' associations, or combat the growing evils of alcoholism. In this work they have been ably seconded by the numerous societies which exist for the promotion of popular instruction in France, the most notable of which is probably the *Ligue Française de l'Enseignement*.

CHAPTER I.—THE AUTHORITIES AND FINANCE.

THE CENTRAL AUTHORITIES.

It may interest Englishmen to know that, whereas in their own country the post of President of the Board of Education (as distinct from the President of the Privy Council) is only a creation of yesterday, the office of Minister of Public Instruction in France dates from 1828. Of his power over the public schools it is unnecessary to speak here. His rights in relation to the private and confessional schools are confined to seeing they are properly staffed, kept in a sanitary state, and conducted in accordance with the law. As has been already pointed out, even teachers in private and religious schools are obliged to possess the *brevet de capacité*. There is no "free trade" in teaching. In England a school may exist without the cognisance of the State. In France schools of every kind must come under State supervision. The effect on the general standard of teaching is obvious.

There are three permanent directors for primary, secondary, and superior education respectively. The primary section is divided up into five bureaux. The first is concerned with the *personnel* of Primary Education, the second with the discipline, examinations and programmes (it was from this bureau that the celebrated circular on agricultural education was issued);

* According to a Ministerial circular quoted by *Le Temps*, November 3rd, 1901, the percentage of male and female illiterates in 1898 was 4·7% and 7·2%, against 25% and 37% respectively in 1879.

the third superintends the construction of schools, etc.; the fourth deals with the primary teachers, and the fifth with the accounts.

A sort of consultative committee for all grades of education assists the Minister. Such a council naturally makes for the oneness and harmony of education, and thereby prevents the various grades from getting too far apart, as well as insuring against any undue overlapping or local redundancy in the school supply. Of its 57 delegates six are elected* to represent Primary Education, which is further represented by several official members. An account of their proceedings is published in the *Bulletin Administratif*, but the actual deliberations of its members are secret.

The Inspecteurs Généraux act as the eyes and ears of the central authority. They also serve as its mouthpiece. They are not glorified primary inspectors, but pro-consuls of the Minister. Their chief duty is to inspect the normal schools, appraise the value of the higher officials, whether academy inspectors, primary inspectors, or heads of training colleges, and record the progress of instruction in any department. As the mouthpiece of the Minister they serve as a channel of communication for any new idea that the central authorities may wish to put into circulation. The utility of their rôle may be judged by the indefatigability of one of their most distinguished members, who, a few years ago, made a tour of all the normal colleges for men in France, in order to deliver a lecture on the precise orientation to be given to agricultural education. They are nominated by the President of the Republic on the proposition of the Minister of Public Instruction. They are paid 10,000 francs a year, and divide up among themselves 27,000 francs for travelling expenses. Their number to-day is eleven (reckoning in two who are "hors cadre.") Along with the *recteurs* they have a voice in the promotion of primary inspectors. There are also four lady General Inspectors for the *écoles maternelles*. Their salary is 3,500 to 5,000 francs, with travelling expenses.

For the purpose of General Inspection France is divided up into seven districts. Ordinarily each inspector preserves for two years at least the same district.† Among those most capable of judging, the prevailing opinion seemed to be that districts are changed rather too frequently. Certainly it is an undoubted advantage for an Inspecteur Général to be acquainted with more than one district in France, yet the districts themselves are so extensive, it probably takes an Inspecteur Général the best part of four years to thoroughly master its manifold idiosyncrasies. On the question of appointing specialists for separate subjects or all round educationists as General Inspectors, the opinion of those I consulted was greatly in favour of the latter. In fact, the most recent tendency of the central authorities was in

* The electorate is composed of the general, academy, and primary inspectors, the lady inspectors, the heads of normal colleges, and the teachers who are members of the *conseils départementaux*.

† These divisions are by no means rigid. It is left to the Minister every year to divide up the work between the Inspecteurs Généraux.

in favour of Inspecteurs Généraux who were really *general*. Formerly there were inspectors for *la morale* and manual instruction. These posts have now been suppressed, as it was felt they sinned against the cardinal rule of regarding the school's curriculum as a whole, and not a collection of separate subjects. As far as I could learn, the only special subject still inspected separately was the "drawing" in the normal schools, which is looked into by an inspector sent by the Ministère des Beaux-Arts. An Inspecteur Général (*hors cadre*) looks after the Musée Pédagogique. Apart from being a museum in which many relics of the past are preserved, as well as a pedagogical library, it has served of late years as a perfect arsenal for lantern slides, which it despatches by the thousand during the winter to teachers who propose to give popular lectures. It further maintains a circulating library of volumes requisite for the preparation of these lectures.

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If one goes for a moment beneath the surface of this powerful hierarchy of officials, one comes at once in contact with a directive and controlling intelligence whose traces one had already remarked in perhaps some of the most sleepy hollows of rural France; and what is still more precious, one encounters the same spirit of devotion to the education cause, of *esprit de corps* that seemed so striking in the humblest of the teachers. In fact, anyone who attempts to estimate the influence of the rural schools in France must take into account the steady pressure that the central authority exerts. It is like a "power station" which, though often unseen and at a distance, furnishes no inconsiderable quota to the sum-total of the schools' energy and efficiency.*

e Budget.

It is interesting to note that the money voted for any particular year is only available for that year and no other. Nor can the money voted under one chapter be used for another without the sanction of the Chamber. Hence the need of supplementary credits. Another interesting point is that the French Budget has to be voted by both Houses, and that credits are often proposed and carried by private members,† instead of there being only one Steward of the Commonwealth, as is practically the case in England. If the Budget is delayed for some reason or other, votes on account for a month's expenses, or *douzièmes*, are taken. In one instance as many as ten *douzièmes* were allotted. The Primary Education Budget consists of no fewer than fifteen chapters. In 1899 the Budget amounted to 153,220,255 francs, against

* Of course there is another side to the shield, though I venture to think it is the less important. But those who dilate on the dangers of excessive centralisation in England will rejoice to hear that I came across one or two functionaries in France who complained of the state of tutelage in which they were kept by the "administration." One official was exceedingly bitter on what he called the "caporalisation" of the department, and its military regime. It discouraged initiative, and confounded obedience with routine. New ideas were only acceptable from certain persons—*bien vues*, etc., etc. Unfortunately this "liberationist" seemed the least likely to profit by a sudden extension of liberty.

† The rights of the French Deputy have, however, in this matter been reduced (*see* Séance de la Chambre du 16 Mars, 1900).

9,988,300 francs in 1870 and 26,677,813 in 1880. Of this sum no less than 121,813,620 francs went for teachers' salaries (not including those in towns of over 150,000 inhabitants).

It is probably worth noting here that the Ministry of Public Instruction is not the only Government office dealing with national education in France. The various agricultural schools and institutions are under the Ministry of Agriculture. The Ministry of Commerce looks after the commercial schools of various grades, as well as the technical schools, some of which are entirely under its control, while it exercises over others a joint supervision along with the Ministry of Public Instruction.

Other
educational
authorities.

THE LOCAL AUTHORITIES.

The local authorities are either professional or lay, or a mixture of both.

France is educationally divided into seventeen academies (now universities). At the head of each is placed a rector, who is appointed by the President of the Republic. He is the head of all three grades of education within his province. The normal schools are directly under him. Of the members who form the *conseil d'administration*, four are his nominees. The higher primary schools are also under his immediate control. But the elementary public schools depend directly on the academy inspector, and the teachers are appointed by the prefect, who, in this case, is regarded as the delegate of the Ministry of Public Instruction. The schools visited on the present occasion were in the three academies of Caen, Poitiers, and Paris.

The rector.

Every department has its academy inspector. Apart from his duties in secondary and higher education he is the real head of the educational authorities for primary education in each department. As regards teaching methods and pedagogical matters he is under the rector; in questions concerning the *personnel* and the administrative side of primary education he is independent of his authority. For a short period the teachers were appointed by the rector. But in 1854 the right passed to the prefects. "This measure, inspired by political considerations, was intended to fortify the authority of the administration represented by the prefects" (Rapport E. P.) This right has subsequently been modified, and any movement in the *personnel* can only be made on the *proposition* of the academy inspector, who has also the sole right of appointing probationers. This system of dual control rarely leads to conflicts. (Rapport E. P.) The teachers are not, however, always protected thereby against the workings of political influences. In fact, one of the teachers' grievances is that of *déplacement d'office*, in which a teacher is sent from one post to another without being consulted. The case seems to be comparatively rare; and in some departments, where the

The
Academy
Inspector.

academy inspector is opposed to it on principle, it is practically non-existent. Considering, however, the strong party feeling which exists in some of the districts I visited, it seems only wonderful that instances are not more frequent; and, after all, absolute immovability would probably not be an unalloyed blessing.

pivot of the
system.

The academy inspector strikes one as being the real pivot between the central authority and the schools. He is not too far removed for the latter to have a thorough working acquaintance with their ways and their wants. His intercourse with the central authority is sufficiently close, and his rank sufficiently elevated, to make his voice listened to and respected. As quasi-independent, for much is necessarily left to his judgment and discretion, he has the opportunity of giving an active and steady support to any ideas he wishes to encourage. On the other hand, his diplomatic duties are scarcely less important in keeping the school in good odour with the population, and inducing the department and the communes to grant to education subventions over and above the *strict nécessaire*.

The following quotation from the preface of the bulky volume just issued by the Ministry on l'Inspection Académique gives an excellent idea of the multifarious duties of these most useful of public servants:—

their duties.

[Their duty is] "to see to the application of the laws, decrees, and circulars which have established compulsory, free, and lay education, reformed the programmes, and assigned the place of honour in the schools to moral and civic instruction. [Their task it is] to make the teachers under their direction understand its spirit, to guide them with their counsels, sustain their courage, and strengthen them against any momentary weakness. [It is also their task] to see that the schools are properly installed, to provoke the zeal of the governing bodies, enter into relations with the authorities of every degree, with elected councils, with local notabilities, in order to create around our schools that current of sympathies which is necessary to their prosperity and development."

The volume is practically made up of selected circulars on all sorts of subjects addressed by the academy inspectors to the *personnel* under them, or of general annual reports to the Conseil départemental, which are taken in both cases from the *Bulletin départemental de l'enseignement primaire*. A cursory perusal of its contents gives a very fair idea of the enormous output of pains and thought lavished on primary education in France since each separate department has its monthly Bulletin. The latter is further utilised for launching an inquiry into any new question which the central authorities, or the academy inspector himself, consider has come within the range of practical politics. Suppose, for instance, the question proposed be that of agricultural education. A copy of the Bulletin containing a long string of inquiries is sent to every teacher, who is obliged to return a complete set of replies. No one, in fact, escapes. Even the teachers in the towns are obliged

to answer, though the subject be a country one like agriculture, if they have passed some of their time in a rural school.

The circulars and general reports are often largely made up of the reports of primary inspectors, or of the debates that take place at the teachers' conferences. Although the academy inspector occasionally presides at these functions, they are officially considered as part of the duties of the primary inspector, and, as such, will be noticed under that heading.

The academy inspectors are taken from the ranks of secondary education. I was told that in some departments they showed a somewhat scholarly indifference for primary education. I can only judge them from what I saw of them, and my verdict must be emphatically the reverse. They seemed to me to be rather one of the factors that are bringing about that individualisation of the departments to which reference has been made. Their influence, already considerable, seems likely to be further increased, as the decentralisation of functions that the need of catering for local requirements is gradually bringing about will leave them with more initiative than ever—a decentralisation that M. Bayet, in the preface to the Rapport on Primary Education, regards as the direct outcome of the legislation of Jules Ferry.

The prefect not only appoints the teachers, he also is president of the *conseil départemental*, which bears the same relation to him as the *conseil supérieur* does to the Minister. The latter must not be confounded with the *conseil général du département*, which corresponds fairly to our county council. The former, if anything, resembles slightly our technical committees, inasmuch as it contains delegates chosen by the *conseil général*, and though it has no power of actually levying a rate, it can indirectly make the communes spend money on education. It is not in any sense a representative body of the ratepayers, as the pedagogical members are in a large majority. The academy inspector acts as vice-president. Other members are the heads of the two normal schools, two male teachers and two female teachers elected by their colleagues, and two primary inspectors. On the discussion of certain questions the private schools have a right to be represented by two delegates. Experts also can be summoned. The duties of the Council are pedagogical, administrative and judicial. They see that the programmes are duly carried out and discuss the educational condition of the schools. In many departments in which a special programme for agricultural teaching has been drawn up, they have been consulted. Their administrative functions permit them to determine the number, nature, and situation of the primary public schools as well as the number of masters. They thus decide on the creation of new schools, determine whether or no a school is properly built or finished, and have powers to allow small communes to unite for school purposes. This, however,

Recruitment
Prefect and
Conseil Dé-
partementa

does not often happen, as the smaller the commune the more jealous is it of its independence.

The council further allows the detachment of a hamlet from one commune to another for scholastic purposes, where distances are great. It grants permission to teachers to take boarders, allows a male teacher to conduct a mixed school on condition that the commune appoint a sewing mistress, keeps a register of teachers who have rendered themselves capable of being fully certified (*titulaires*), gives its opinion on the number of pupils required in the normal schools, can depute a third of its members to inspect any school, and further appoints one or more delegates by canton to supervise public and private schools. Its judicial attributes make it an appeal court in the question of the opening of a private school. It is also a fountain head of rewards and punishments. It has a voice in the promotion of teachers, and it is on its recommendation that the Minister awards medals and diplomas for distinguished service to the teachers. Its disciplinary powers are very great, extending to a complete prohibition to teach in any school.

The Primary
inspectors.

Size of
districts.

"The inspectors of primary education are the delegates of the State charged with the oversight of the establishments devoted to that form of instruction." They depend on the academy inspector. Roughly speaking there is about one to each *arrondissement*. Their actual number to-day is about 441 for France. To these must be added three female inspectors for the maternal schools and three for girls' schools in Seine and Seine-et-Oise. It is worth noticing that there are no sub-inspectors. According to the statistics for 1897 there is one inspector for every 149 primary public schools, with 230* departments and 232 masters, or for 198 schools of all kinds for 324 departments and 356 masters and mistresses. The biggest *circonscription* is Roubaix, with 1,041 departments, and the smallest Batna, with 115. An inspector told me he was once in the old days in a very poor and mountainous *arrondissement* where there were only 27 schools. This has since been suppressed. There is a tendency to-day to reduce the number of inspectors and equalise the *circonscriptions*.

Most of the *circonscriptions* in the districts I visited seemed to be rather above the average. One of the biggest I came across was that of Argentan, with 207 public schools and 22 private schools. This is some way off M. Paul Bert's ideal of an inspector to every 100 schools. Mere figures do not always give a fair idea of the work. The actual dimensions of the *circonscription* must be taken into account, and the accessibility by rail of its various parts. Thus one *circonscription* through which I passed has a school as far distant from the *chef-lieu* as 73 kilomètres [45½ miles], of which 65 kilomètres are by rail and eight by road, and the furthest schools in the opposite direction are nearly as inacces-

* Classes (French).

sible. The majority of inspectors use bicycles. In fact, the possession of a machine must be practically indispensable. As one of these hard-working officials remarked, "If the bicycle had not existed, it would have been necessary to invent it for the primary inspector." With such distances to cover, it is obvious that the majority of schools can only be visited once a year, or even less; as a high official said to me, this is far too little for the few unsatisfactory schools which are to be found in every *circonscription*. He preferred, therefore, that the inspectors should leave the better schools unvisited for even a longer period and concentrate their attention on whipping up these educational laggards.

In England the primary inspectors are appointed by the President of the Board of Education. In France the inspectors are selected by a system of examination. The conditions of eligibility are so drawn up as to insure a high standard of knowledge on the part of the candidate. The examination itself, which is also the same for the heads of normal colleges, is usually held twice a year, and is divided into three parts. The first, which is a written composition in pedagogics and school administration, is held simultaneously in the *chef-lieu* of all the departments, the subject set being thus the same for all the candidates. For those who pass the written examination, there is an oral examination at Paris, each candidate having a *viva voce* on certain set books, on a question of theoretical and practical pedagogy, and finally on questions of school law and administration. Lastly there is a practical examination, which consists of a visit to a school, followed immediately by a verbal criticism of the same by the candidates.

Recruitment
of the
Inspectors

The following are the list of subjects for the composition, in Pedagogics, for 1898, 1899, and 1900:—

Subjects set
at examina-
tions
pedagogics

1898. *Subjects Common to Male and Female Candidates.*—Toleration.—How can one give to pupils of the primary schools a simple and clear idea of it? How can one develop in them the sentiment and practice of it?

1899. First Session.—*Male Candidates.*—A common cause of complaint is that the spirit of initiative has diminished in France. To what extent can the teacher in the elementary, primary, or higher primary school manage to awaken and fortify it?

Female Candidates.—Education at the maternal school. Its principles.

1899. Second Session.—The teacher, whether male or female, ought to teach the children order and economy. How are they to set about it in order to do so with moderation? What precautions will they take to prevent the exaggeration of these qualities from leading them into those faults from which it is of the highest importance to preserve childhood?

1900. First Session.—What is the meaning, as regards primary education, of the phrase *préparer sa classe* (prepare the lessons beforehand)? How will you bring it home to teachers who have had several years' experience of teaching that it is necessary to prepare the work for one's class all one's life long?

In school
aw.

The following are the list of subjects set for the composition in school administration for the same period :—

1898. *Male Candidates*.—Explain the legal regulations relative to the representation of primary education on the *Conseil Supérieur de l'Instruction Publique*. What are the functions of this council as regards primary education? Have you any observations to offer on the subject?

Women Candidates.—What are the regulations relative to internal supervision in the normal schools for girls? How should the directress organise it? In what spirit ought the teachers to interpret their participation in the supervision?

1899. First Session.—*Male and Female Candidates*. The *Certificat d'études*. Its organisation and the modifications it has undergone. Your opinion of the criticisms to which it has been subjected.

1899. Second Session.—What are the obligations of the commune in respect to primary education?

1900. First Session.—The higher primary schools: their general organisation and staff. Candidates should avoid discussing details in the programme.

The set
books.

The list of set books for the last few years is as follows :—

1893-97 :—

Fénelon—*De l'éducation des filles*, Chap. I. à VI. et XI. à XII.

Les pédagogues de Port-Royal, par. I. Carré (*Extraits de Nicole, de Sacy, Guyot, Coustel, règlement de Jacqueline Pascal*).

J. J. Rousseau—*Emile*, livre III.

Rollin—*Traité des études* (édition F. Cadet).

Anthoine—*A travers nos écoles; les 42 premières pages. Notes d'un inspecteur*.

Herbert Spencer—*De l'éducation* (édition populaire), Chap. II. *De l'éducation intellectuelle*.

Gréard—*L'éducation des femmes par les femmes*.

Blackie—*L'éducation de soi-même* (traduction F. Pécaut).

Channing—*De l'éducation personnelle* (traduction Laboulaye).

For 1898-1900 the authors set included, among others, Fénelon, J. J. Rousseau, Condorcet, Emile Boutroux, F. Buisson, and Horace Mann. For 1901-1903 the extracts are taken from the works of Montaigne, Rousseau, Channing, Michelet, Bain, Pécaut, and Jules Ferry. It is worth noting the large use made of English and American writers on education, and the absence of any German books on the subject.

Viva voce.

The so-called "explanation" of these texts consists in a *viva-voce* comment on one or two pages, which the candidate is given an hour to prepare.

In theoretical
and practical
pedagogics.

The question on theoretical and practical pedagogy and the questions on school law and administration are assigned by lot to the candidates. Each candidate is allowed two hours to prepare his replies, during which time he is under lock and key.

The following are a few specimens of the questions in pedagogy :—

1. In a pedagogical conference you set forth the principal reasons why the school attendance has been defective, and you indicate to the teachers what they can do, without having recourse to the school commission, to improve it.
2. Discipline. How do you understand its application to the pupils of all ages in your primary schools?
3. How, in your opinion, can a teacher in his commune extend his educational influence outside of and beyond the school?
4. How would you regulate the use of monitors in the elementary school?

Specimens of questions on school law and administration :—

In school
law.

1. The functions and rôle of the inspector of primary education in the matter of examinations.
2. Right of opposition to the opening of private schools. Closing of these schools.
3. Class-books, prizes, and supply of school materials.

At the end of the examination an exhaustive report is addressed to the Minister by the President of the Board of Examiners (consisting of the Director of Primary Instruction, the *inspecteurs généraux* for primary instruction, four lady inspectors or directresses of normal schools, an academy inspector, four university professors, and two primary inspectors). Taking that of 1899, the President, M. Jacoulet, after enunciating the number of candidates and the classes from which they were drawn, complains of the low marks in pedagogy obtained by many candidates, and enumerates the qualities most essential in a good inspector. Returning to the composition, which was concerned with the supposed lack of initiative in France, he criticised some of the most common faults in the treatment of the subject, and gives an admirable *résumé* of how the question should have been dealt with and discussed. The administrative problem treated of another burning question—the *certificat d'études*. Here most of the candidates failed to treat the subject with sufficient philosophic breadth. The *lecture expliquée*, according to the same authority, is one of the most difficult and more decisive tests. Not only must the candidate be master of his subject, he must also give it the tone and style of an inspector addressing his subordinates, a somewhat difficult feat before such an august assembly of examiners. The *épreuve pratique* at the end is also one of the most decisive ordeals. It is essentially a test in powers of observation and judgment. Such is the mere gist of M. Jacoulet's report, which abounds in the most practical hints for the unsuccessful quite as much as for the successful candidates; but those who desire to obtain a more thorough knowledge of the searching nature of the examination should read pages 47–133 of the Report I.E.P., which gives an exhaustive *résumé* of the subject.

The extreme severity of the examination is further shown by the small percentage of candidates who have passed in the last five years.

—	Examined.	Passed Written Examination.	Successful.
1895	159	27	8
1896	337	50	21
1897	261	42	23
1898	105	21	10
1899	229	38	22

Up to 1887 teachers were eligible for the examination, which was, indeed, open to all persons of a certain academic standing. In fact, in the years 1880–1888 they formed the majority of the successful candidates, numbering 122 against 93 professors from the normal and higher primary schools, 29 secretaries and clerks from the offices of academy inspectors, and only 12 professors of secondary education. The comparative failure of the latter is

significant. It is probably due to their ignorance of a grade of teaching whose methods and regulations are so unlike their own. After 1888 the regulations were framed to further raise the intellectual standard of the candidates by demanding the possession of certain degrees as a *sine quâ non* of admission to the examinations. This had the effect of practically reducing the examination to a close competition between the professors in the normal and higher primary schools. Since then the regulations have been again widened, but the significance of the change is best seen from the fact that of the total who passed during the period from 1889-99 inclusive, only 30 have come from the ranks of elementary school teachers; the Secondary professors have furnished four, the clerks and secretaries one, while no fewer than 161 belong to the category of professors in normal or higher primary schools.

Pros and cons
of the actual
system.

On the vexed question whether the elementary school teacher or the normal professor makes the best inspector there seems to be considerable difference of opinion. The elementary school teacher is often more at home in the school and knows what its real capacities are and what it is reasonable to expect from it; in a word, his pedagogical equipment is often superior. On the other hand, the normal professor, from having more frequented the world, has learnt something of its ways and diplomacy, qualities which are by no means unimportant in districts where political feeling at times runs high, while they have also a positive value in helping their possessor to persuade the communes into taking a larger view of their duties towards the schools.

Emoluments.

The inspectors are divided into five classes, receiving 3,000 francs in the lowest class, with a rise of 500 francs for each class up to the maximum of 5,000.* These salaries are paid by the State. They are also allotted so many travelling days' expenses at the rate of 10 francs a day, according to the size of their *circonscription*, and finally the department allows them a minimum indemnity of 300 francs.

Duties.

The duties of the inspector in the private schools are confined to examining the register and the sanitation of the school. They cannot inquire into the teaching except to assure themselves that it is not contrary to the morality of the constitution. Not infrequently the teachers in the private schools beg the primary inspector to examine the class, but the latter nearly invariably refuses. They seem to have a pretty general notion that the methods in these schools are inferior, and have no particular wish to improve them.† This is probably not far from the truth as regards the religious rural schools, considering the pecuniary difficulties under which they labour.

* In Seine the inspectors are paid on a higher scale.

† See page 150 (passage from Matthew Arnold).

In the public schools the inspectors' duties may be summed up under three main heads. They are appointed to keep an eye on the hygiene and morality; to see that the programme and regulations are duly observed; and, thirdly, to act as "masters of method" to the teachers. They naturally have a voice in the opening of any new school, whether public or private, and also in the appointment of teachers. They preside over the examination for the *certificat d'études*. They can also, as a last resort, set the law in motion in case of non-compliance with the school attendance regulations. On the other hand, it must not be assumed that they rank *pari passu* with our English inspectors. The latter have a wider province to overlook, and under certain restrictions are far more free than the French inspector, who in all things reports directly to and depends on the academy inspector. The latter is, of course, also the authority for higher education, but otherwise, as far as primary education goes, he is in some ways more the French counterpart of our elementary inspectors than the French primary inspector is.

One important branch of the inspectors' duties is the organisation and direction of the cantonal meetings of teachers. The fine volume just published by the Ministry on the "Inspection de l'Enseignement Primaire" is an eloquent monument of the pedagogical value of these conferences, specimens of which occupy quite half of the book itself. The public teachers' travelling expenses are paid, and even assistants are obliged to attend. Private teachers can be present by permission. In most departments there are two conferences a year, one devoted to the theory and the other to the practice of teaching. The former is generally held in the spring, and the latter in the autumn. Preparations are made a good time in advance for the first conference. At the last meeting of the year a list of subjects is proposed and drawn up; these are submitted to the approval of the academy inspector, and published as soon as possible in the Bulletin départemental. Each teacher is supposed to write a thesis, or contribute his impressions in the form of notes. These compositions are classed according to districts, and the set from any particular district are given to one or two teachers to condense in a memoir. This is again sent to the inspector, who thereupon prepares a report or address on the subject. A discussion follows, and at the end the inspector, if necessary, sums up what seem to him to be the conclusions arrived at, and, if necessary, puts them in the form of resolutions to the meeting. This theoretical discussion is generally followed by a short criticism by the inspector on any points of teaching, methods, discipline, or conduct that have struck his attention during the past six months.

Teachers' conference

At the autumn conference a practical lesson is often given by a teacher, very generally on a subject which has been discussed theoretically at the preceding reunion. At the close of the lesson the teachers gathered in council criticise their colleague's methods and suggestions, and draw practical conclusions for themselves.

specimen
inference.

I had the good fortune to be present at one of these spring meetings in Loir-et-Cher, which was presided over *pro hac vice* by the academy inspector. The subject, which speaks volumes for the good relations between the authorities and the teachers, was the thorny question of overwork and extraneous tasks, and suggestions were invited on how to lighten the already heavy burden of the teachers. The conference over, the inspector read an illuminating essay on the civic education of women, and for which we may perhaps find space here for a very rough and incomplete *résumé*.

"The education of the citizen was accepted by all to-day, but not of the woman as citizen. There was always the fear of woman being rendered unfeminine. The dominant idea still was that of the housewife. *La femme ne donne son parfum qu'à l'ombre*. Still there was a place well marked out in civics for the wife and the mother. She has a stake in the country, if it is through her sons and her husband, who may one day have to fight for it. She has a right to know about the laws and politics, for these affect her and hers in a most vital fashion. She, too, has a personality to develop. She also, in France at least, should know something of business, for she takes a considerable part in the commerce of the country. It is necessary, then, she should learn to appreciate the full sense of such expressions as 'fatherland,' 'law,' 'citizenship.' Otherwise they will be but little more than mere words to her. Once she leaves the school she is lost to it, if she cannot be drawn into the *cours d'adultes*. Without a proper civic training she will fall back into the old rut, and her daughters will go to the *école religieuse*, and the separation which cuts France in two, even in the humblest homes, will be perpetuated. The sole remedy is *l'enseignement de la citoyenne*. Reading will prove a fruitful source for moral teaching. Napoleon, from the moral point of view, will appear to her, on thinking of the tears and bloodshed he caused, as a subject not for pride but execration. *Ce bronze que jamais ne regardent les mères !* Not hatred, but love should be the motto, fraternity within the Fatherland, and fraternity without. Sympathy for inferior races a necessary subject to be taught. The woman, maybe, will never leave her village, but her son will go into foreign lands, and practise there what he has learnt at home. Woman must be educated, not like a man, nor like a child either. Hence you can teach her heroism by the example of the women during the terrible year of 1870. Such is the rôle of the *école laïque*. Neglect this form of education and there is no essential difference between the teaching of the nuns and that of the lay schools. This civic training is the real *raison d'être* of the education of women, an education which does not demand the abjuration of sex, but makes the woman still more feminine, because it completes the education of the wife and the mother.

This eloquent address, of which the above quotations are but the *disjecta membra*, was followed by a criticism on school matters by the primary inspector, which will help, perhaps, to give a fair notion of these meetings.

In speaking of the *certificat d'études*, he advised the teachers to discourage the pupils from asking permission to enter when under the legal age. The "composition agricole" should be above all things simple, containing scientific ideas and notions in moderation. He reminded his audience of the Orphan Asylum for the children of teachers, which contains 2,000 children up to fifteen. A lottery was being got up for it. Female teachers might work

small articles for prizes. "C'est une œuvre de solidarité." The subscription was light—3 francs for members and 6 francs for honorary members. All should subscribe, for the asylum was common to all France. The Society for the Protection of Animals rendered a real service. Children should be encouraged to join. Instances were given of children who had given up birds'-nesting. Need of looking after the school furniture. Care to be taken during sweeping. A word for temperance societies—need of encouraging them. The contagious diseases—scarlet fever, measles, chicken-pox. Necessity of warning the academy inspector, who will send down doctor*; child meanwhile to be kept from school. Children suffering from ringworm can be taken back at a pinch. Impartiality to be practised by the teacher, especially in the capacity of Secretary of the Mairie. Remember you are functionary of the Republic, and nothing more. Need of husbanding one's voice. Loud speaking deprecated; produces bawling on the part of the children, and laryngitis on the part of the teacher. Agricultural education must be as *practical* and *experimental* as possible. A few words on the date of the holidays. Certain books suggested to the teachers by the inspector for reading-books.

I talked to a good many persons about the utility of these conferences. Some of them spoke of the difficulty of getting the teachers to speak; others complained that the composition was "trop peu sérieux." In one case the inspector found seven teachers had simply copied an article out of a pedagogical journal, and this seems to be a very common occurrence. On the other hand, another inspector was strong on the benefit derived from these conferences, though he admitted the composition was not very valuable. The real key to the solution seems to me to lie in the remark of an academy inspector, who said "they were excellent things with a good inspector, affording a sort of neutral ground on which the two parties can meet and discuss. The whole thing depends on whether the inspector regards them as a task or an aid to his work"; and this opinion I found reiterated in various quarters. In short, the personality of the inspector is everything. It is very obvious that an inspector with strong ideas on the exact way in which everything should be done is less likely to elicit the ideas of his subordinates than one who believes in a multitude of councillors. But, given a sympathetic inspector as chairman, who is anxious to receive advice as well as to give it, and who believes in the supreme merit of letting teachers as far as possible puzzle out questions for themselves, only coming in at the end to give a *dernière main* to their conclusions, such meetings no doubt are a big pedagogical success. Apart from this, however, they possess the advantage of allowing the inspector to see and talk to many teachers whom otherwise he only meets once from year's end to year's end, and that, too, when they are not under the ordeal of having their schools inspected. It also gives the teachers the oppor-

Use of these
conferences

* School doctors were created by the law of October 30, 1886.

tunity of making each other's acquaintance, and through these semi-official gatherings laying the foundation of many pleasant professional friendships, and participating in the various good works of solidarity, whether it be a society for mutual aid or an association for providing for the widow and orphan. These meetings are especially useful to the teachers in lonely communes "six miles from anywhere," who find in these meetings a healthy stimulus against the lethargy that lurks in sleepy hollows.

In 1881 Jules Ferry, in a circular addressed to the rectors, spoke of the Primary Inspectorate as follows :—

Appreciation
of the Inspec-
torate.

During the half century that this institution has existed with us it has proved its value, and the services it has rendered are such that one can say it has no longer any adversaries. Established at first on the weakest of bases as a sort of benevolent and temporary committee of the arrondissement councils, long condemned to feel its way slowly and to recruit its ranks with volunteers who were more remarkable for their goodwill than their competence, the primary inspectorate has won for itself by the force of circumstances, or, rather, by its own merit, the important place it occupies in our school organisation. Other countries have been able to surpass us in the perfection of their equipment and methods; but none, perhaps has so speedily and resolutely linked the destinies of its national education to the homogeneous composition and incessant activity of an official body of lay inspectors. To-day, when the primary inspector is necessarily recruited among the flower of the teaching body, and appointed on the results of competition in professional knowledge, the standard of which has recently been once more raised,* he is one of the functionaries of State whose authority in its modest limits is the best established and the readiest accepted.

A visitor in the rural schools of North-west France in 1900 would have little hesitation in endorsing this apt *résumé* of twenty years ago.

The Mayor.—The mayor of each commune has the right to visit all schools, whether public or private, within the area of the parish. He can also have them inspected by a doctor. He is supposed to preside over and convene the *commission scolaire*, whose duty it is to look after compulsory attendance, and himself to assure the execution of the law on the subject. He receives demands for opening new schools, and has a right to oppose these proposals. He also commissions the plans for new schools, and signs all contracts.

Délégués
cantonaux.

The *délégués cantonaux* are apparently meant to represent the lay element in the educational hierarchy. It is worth noting that they are often *délégués* in villages other than their own. In this case they seem to stand for the wider interest of the canton, against the sometimes too narrow ideas of the commune. Their duties, in some ways, resemble school managers', but are much more limited. Their functions are confined to looking after the state of the buildings, school furniture, sanitation, and behaviour of the pupils.

* The French have evidently taken to heart the advice of M. Van den Ende to M. Cousin, when he visited Holland in 1836:—"Take care how you choose your inspectors; they are the men whom you ought to look for with a lantern in your hand."—(Report *M.A.*, page 136.)

They may not meddle with the teaching. They can, however, be present when lessons are given, not as educational experts, but as representing the family and social element, and can even address the children if they wish. They are further looked to for helping to improve the attendance, for giving prizes, and encouraging the complementary work of the school—the evening classes, the school libraries, the *sociétés de parents*, etc.

The idea of these school patrons is evidently an excellent one, but it is far from being generally realised. One inspector went so far as to call them the fifth wheel in the school coach. Another declared their chief value was the pecuniary aid they gave to the schools. A third said they only put in an appearance on the day of the school inspection, and one of the teachers I spoke to on the subject seemed to regard their presence in his school as a veritable intrusion. Others, however, spoke more favourably. At Mayen in Sarthe I heard of a *député* who has done much for the school. The academy inspector of Lorient (1900) speaks of several delegations which function regularly, and in Calvados, according to the academy inspector's report, the system seems to produce good results. It certainly has a good deal to recommend it. Probably the chief reason it is not so successful as it should be lies in the difficulty of finding persons of leisure willing to undertake the task. The international conference on primary education proposed its suppression. This seems to have had the good effect of awakening considerable interest in the matter, which culminated in a conference of *députés* on the subject (February 1901).

All this hierarchy of central and local officials will doubtless seem complicated to English minds. The extraordinary thing is that, as far as I could learn, the machine, for all its complexity, works smoothly enough. The truth is the province of each particular functionary is so clearly thought out and defined that there is no debatable ground over which ambitious rival authorities can wrangle, and with a place for everything and everything to see that it is always in its place, any encroachment of one or less doubtful legality in the field of national education is absolutely impossible. The *cadastre* of French Education has, so to say, been completed: fresh adjustments may take place from time to time between primary and technical education, or between or higher primary and secondary, but there is no possibility in a country, where the whole educational field has been mapped out and allotted for sure to a definite sphere of influence to be fought for by two local educational authorities.

This clearness of plan is naturally led to clearness of power. For when an individual sees clearly what is to be done he only waits his opportunity to do it. Whereas we in England, for reasons which historically are easy to explain, have only regulated by the

How the machine works.

and starts in education, the Third Republic has, especially in Primary Education, carried out a consistent policy, and consistency in policy, as Lord Rosebery has shown, is an important factor in success.

As a corollary to this, it is clear that, all money spent in French education, being spent on a definite plan, has, no doubt, been spent with the greatest economy, because unnecessary schools have rarely been built except in a few of the smaller communes, which refused to be united to another commune. And lastly, this clearness of plan has singularly facilitated an intelligible adjustment of the financial burden between the three contracting parties—the State, the department, and the commune. No doubt these different blessings are directly due to the working of centralisation, and, as Matthew Arnold pointed out as long ago as 1861, we are too sensitive as a nation to any idea of State control. Yet if we go still further back in our history, we find that this distrust of the central authority is not a part and parcel of our national being, and that, on the contrary, it was precisely the magnificent State control and State regulation of the reign of Elizabeth that welded and consolidated the nation together, and helped to place us where we are to-day. From other sources we have derived that freedom, elasticity, and variety of which we are so justly proud, and which manifests itself in our institutions, and especially our education. Surely we can do what our fathers have done. The mere introduction of some system of general State oversight and delimitation in education would help to prevent the unedifying spectacle of one branch of education being starved for want of adequate pecuniary assistance while another has had to be pulled up by the law courts for its very natural zeal to give instruction in the higher grades of education.

FINANCE.

Department. The two local authorities concerned with the raising and spending of money on the schools are the department and the commune.
Conseil général.

The *conseil général du département* corresponds, more or less, to our county council. It bears the cost of the maintenance of the normal schools, with the exception of the staff's salaries. It pays a small indemnity to the primary inspectors (300 francs minimum), and supports the expenses of maintaining the academy inspector's office, which for convenience is generally situated in the prefecture itself. It likewise furnishes the travelling expenses of the agricultural professor of the department, and pays for the masters, foremen, and workmen entrusted by it with the teaching of agriculture in the primary schools of all grades. It further votes subventions to poor communes for building purposes, founds scholarships, grants aids and rewards to

teachers, presents prizes to successful candidates in the *certificat d'études*, and pecuniarily assists evening continuation classes, the formation of old boys' societies, etc.

Up to 1889 teachers were paid by the commune. Inequalities of salary were great. By the simple expedient of handing over to the Treasury instead of the communes the proceeds of the four centimes levied on the four *contributions directes*, the teacher at once became a full-blown functionary of State, the money for salaries was pooled, the gross inequalities which hitherto existed were abolished, a minimum living wage was adopted, and the teacher rendered once for all independent of the local authorities as far as his salary was concerned. In order, however, to take into account the greater cost of living in the towns, an indemnity of residence on a sliding scale has been arranged for localities where there are *agglomérations* of over 1,000 souls and for the *chefs-lieux* of cantons, the minimum *indemnité* being 100 francs. (It is worth noting the *octroi* only begins with towns of 4,000 inhabitants.) The schools, however, are built and maintained by the communes. Every commune not united to another for scholastic purpose is obliged to have a school. In certain instances communes are allowed to hire buildings, but the tendency is to make them build schools of their own. In case of refusal on the part of a commune to build, the prefect has the right to order the construction of a school, and to inscribe the cost on the budget of the commune. This only occurs comparatively rarely. The most obstinate commune finishes by yielding to the gentler means of persuasion. Under 500 population, the school is a mixed one. Over 500, the commune is obliged to have separate schools for the two sexes. Even in this case only a few communes, and those just on the border line of 500, are still unprovided with the two schools. Only communes with 2,000 inhabitants, or with *agglomérations* of 1,200 persons, are obliged to have maternal schools. The presence of a religious school in the commune in no way dispenses the commune from having to provide a school or two, as the case may be, even if the school is not in the least desired by the inhabitants. It occasionally happens, more especially with girls' schools, that one finds a school with only one or two in it, and in one authenticated case I heard of, the teacher was left a whole summer through without any pupils at all. This was in the Centre where religious feeling at times runs high, and the administration has difficulty in placing Protestant teachers. On the other hand, the communes cannot subsidise with public money any private religious schools within its borders. In places where the population has fallen below 500, once the commune has built a school, it is bound to maintain it for thirty years if it has received State aid. The same rule applies to the maintenance of higher grade schools, or *cours complémentaires* (ex-standard classes), once they have been created. The commune is expected to maintain a *caisse de*

l'école. The right is granted to the commune of subventioning the various *œuvres post-scolaires*, the *cantine scolaire* (the school kitchen or restaurant), and the school libraries. The commune also votes money for prizes, and supports the cost of extra classes, such as singing and domestic economy. The extent of these voluntary grants from 1889–1897 exceeded 176 million francs, about £7,040,000,* or roughly, £880,000 a year.

Comparison
between
quotas of
State, de-
partment,
and
commune.

In 1889 the amount spent by the three parties (excluding the outlay on building and re-furnishing) was:—*Commune*: 71,956,078 francs (roughly, £2,878,243*); *Department*: 17,907,315 francs (£716,292); *State*: 86,061,506 francs (£3,442,460). The next year the cost of the teachers in the primary and normal schools was transferred to the State by the transfer of the four *centimes additionnels* from the communes and the departments to the State coffers. The *State's* contribution bounded up to 120,561,862 francs (£4,822,474); the commune's share sank to 56,580,247 francs (£2,263,209), and the department's quota was reduced to a very small figure.

In 1897 (last year available for statistics) the State spent 143,768,968 francs (£5,750,758), and the communes 70,246,285 francs (£2,809,851), or a grand total of 214,015,253 francs (£8,560,610).

Outlay on
building.

The outlay on building amounts in the last thirty years to 688,713,954 francs (£27,548,558). The normal schools alone are accountable for 51,901,819 (over two millions sterling!) under this head. On the other hand, the expenditure of Paris and the larger towns is not counted in. Were it added, the grand total would be over 850,000,000 francs, or 34 millions sterling.

Percentage
of contribu-
tions.

The percentage of contributions of the three parties towards the building and furnishing of the normal schools has been as follows:—*State*, 38 per cent.; *departments*, 59 per cent.; *communes*, 3 per cent. Ditto for the primary schools:—*State*, 40 per cent.; *departments*, 4 per cent.; *communes*, 56 per cent.

The approximate value of the primary schools was set down in 1897 at 1,170,000,000 francs (£46,800,000). During the period 1894–97 the average cost of a school was 26,335 francs (£1,053 8s.); of a “department,” 14,870 francs (£594 16s.); of a school place, 299 francs (or very nearly £12 against £14 12s. 8½d. for the same object in the English Board Schools during the period from 1870–1900).

Cost per
head and
general cost.

There are no accurate statistics about the religious schools. Les Ecoles Chrétiennes libres spent about †39·70 francs (£1 11s. 2½d.) per pupil in 1881–82, as against 46 francs (£1 16s. 9½d.) per head to-day for the public schools, or 56 francs if the sinking fund on building loans be reckoned in. In 1896 M. Delpeuch stated that the

* Taking the franc at the rate of 25 = £1 and omitting shillings. Centimes are also omitted.

† Includes rent.

religious teachers received at least 228 francs (£9 2s. 5d.) per head less than the lay teachers. Nevertheless, the official statisticians assume that the private schools spend about the same per head as the State schools, which makes them calculate the cost of primary education in these establishments at about 87,000,000 francs a year. The total cost of primary education in France a year is therefore about 293 millions of francs (£11,720,000), without counting the outlay on buildings, or 350 millions with (£14,000,000).

CHAPTER II.—THE STATE* TEACHER.

(i.) HOW ALL-ROUND EFFICIENCY IS SECURED (INCLUDING RELIGIOUS SCHOOLS).

The first point that strikes an English observer who visits even the most out-of-the-way French schools is the high standard of average efficiency on the part of the teachers. This is largely due to the operations of the law of the 30th October, 1886, which, among other things, enacted that no one can be a teacher in a public or private school who is not French, is not at least in possession of the *brevet élémentaire*, has not attained 18 years of age in the case of a male teacher, or 17 in the case of a female. It further divided the State teachers into probationers † (*stagiaires*) and *instituteurs titulaires*, who are either *directeurs* (or *directrices*) *d'école* or assistants (*adjoints chargés de classe* or *adjointes*). The word *classe* used here is technical, and implies a separate division or department of a school under a regular master. The English word "class" is best translated by "*cours*." A director (or directress) is a teacher at the head of a school with more than two "classes." A *stagiaire* becomes a certified teacher (*titulaire*) by passing an examination in the theory and practice of teaching, and being appointed as *adjoint* to a school. These regulations do not concern the religious schools except in so far as the need for teachers to possess at least the *brevet élémentaire*. Efficiency

Although, of course, at the passing of the law, which in its first form dates from 1881, several categories of existing teachers were exempted from its action, it has been so thoroughly carried out since that the compilers of the official statistics for 1897 are able to make the proud boast that all teachers, male and female, in the public and private schools are in accordance with the law, while the number of teachers without a diploma has shrunk to a very low figure. Thus in 1897, excluding the maternal schools, Calvados had in its State and private schools, out of 1,659 teachers, only 3 male and 66 female teachers who were without the *brevet*.

* The terms teacher, school, etc., always apply to State education unless the religious schools are expressly mentioned.

† The "*stagiaires*" must not be confounded with the English probationers (see Art. 33 of Code), who are at the bottom of the ladder, they correspond rather to the provisionally certificated teachers.

Out of 1,257, Orne had but 4 and 77 respectively; Sarthe, out of 1,471, had 6 and 92; Indre-et-Loire, out of 1,156, had 6 and 75; Loir-et-Cher, out of 1,035, had 4 and 43. The greater number of female teachers is to be accounted for by the fact that there are still over 8,000 religious teachers in the State schools, and, again, that in the religious schools themselves the female teachers outnumber the male in the proportion of 4 to 1. The figures for all France and Algeria are equally striking. Only 818 male teachers out of 74,993 teachers are without the brevet, or a little over 1 per cent.; of these only 101 belong to the State teachers, who number 56,030, which gives the remarkable figure of less than $\frac{1}{2}$ per cent. for all France among the male teachers. 7,547 out of 84,342 female teachers, or about $8\frac{3}{4}$ per cent., have no diploma; of these only 2,272 belong to the State female teachers, who number 49,802. Thus only $4\frac{1}{2}$ per cent. of the State female teachers have no diploma. In the maternal schools, where the rule has been in force for a shorter period, out of 5,392 State teachers only 293 are without the brevet, while among the 4,022 private teachers 759 have no diploma, which once more shows the superiority of efficiency among the State *personnel*, as in one case the percentage of those without any certificate of knowledge is over 5 per cent., and in the other over 18 per cent.

Although the *brevet supérieur* is required only in the case of masters in higher primary schools, it is nevertheless frequently held by teachers in the elementary schools. In fact, there are in the State schools (including higher primary) no less than 17,059 male and 14,429 female teachers possessed of this certificate, while in the private schools the corresponding numbers are 674 and 3,988 respectively.

In addition to this, between six and seven-tenths of the present staff in Government schools have passed through a course of three years' studies at a training college.

The *certificat d'aptitude pédagogique*, which, with certain exceptions for existing teachers, is compulsory in State schools for all who aspire to become fully certificated, is now held by 45 per cent. of the *personnel*, the number of holders having risen from 31,073 in 1877 to 44,523 in 1897.

The teachers in the private lay schools are, of course, subjected to exactly the same *régime* as the others. These schools, however, are fast dying out, caught, as someone said to me, between the anvil and hammer of State and religious rivalry. In 1892-93 they numbered 3,356, and only 2,850 in 1896-97. I never came across one in the course of my travels, though I found two State schools which had been previously private lay schools. Many of the lay teachers, who number 6,778 (or 7,049 including maternal schools), are employed in religious schools.

No "bogus" schools.

It is worth noting that no private school in France can call itself higher primary unless the director or directress hold the *brevet supérieur*. The abuse of such high-flown terms as Academy, College,

High School, etc., by schools whose teaching is purely elementary is impossible in France, where there is a State guarantee attached to every type of school, which implies that the teaching provided is in accordance with the title. The caricature of the bad English private school which is known under the name of the Dotheboys Hall has no counterpart in France. It is probable that the worst of our private schoolmasters would be able to give Mr. Squeers points in a spelling-bee competition, though some of them, even with the present relaxation in spelling, might break down at the examination for the *brevet élémentaire*.

Perhaps a word may be said here for one or two minor agencies which contribute towards the efficiency of the State teacher. Minor factors.

Educational papers.—The Educational Press is important enough in France to have an entire international congress of its own. It numbers no less than fifty publications. In helping to force on the questions of the day, in keeping the otherwise isolated teachers fully alive to their importance, in encouraging them to take a real and sustained interest in current pedagogics, and thereby fostering the true educational spirit, they render, no doubt, most valuable services. At their head may be placed the semi-official *Revue Pédagogique*; other well-known papers are *Le Journal des Instituteurs*, *Le Manuel Général*, *L'Ecole Nouvelle*, *La revue de l'Enseignement Primaire*, *Le Volume*, *L'Ecole laïque*, *L'Avant-garde Pédagogique*, *L'Instruction Pratique*, *Le Petit Provincial*, *La Réunion Pédagogique*, *Les Bulletins des toutes les Amicales*, etc. etc.* Educational Press.

Pedagogical Libraries.—The idea of these educational reference libraries established in each department is an excellent one. They do not however render the services they might. The academy inspector of Indre-et-Loire writes: "The pedagogical libraries hardly render any service." And yet, as he points out, their use is the best specific against the dangers of routine. The report of the academy inspector of Sarthe is scarcely more encouraging. The number of volumes borrowed in 1898 was only 600. The reports of the inspectors of Loir-et-Cher and of Orne indicate some of the causes of this neglect. Though there are no less than 22 of these libraries in the former, with 7,351 volumes, the greater number are merely school books presented by publishers. In Orne there are 37, or one for each canton, but as the academy inspector states, the works are old and out of date. What is wanted are funds to make new purchases. Pedagogical Libraries.

The Musée Pédagogique has also a circulating library of 494 works which are principally composed of books necessary for the various examinations for which teachers enter. In 1899 there were 251 borrowers for 2,175 books.

(ii.) POSITION OF THE TEACHER.

Teachers generally commence with the position of assistant in the country. They next move into the town schools as assistant; after that they return to the country as head of a school, from whence the best go back to preside over the large town schools. In this way the majority of town teachers have had some experience in country districts. At the same time I was assured, by at least one authority, the teachers were generally comfortable in State teachers.

*For a convenient review of the French pedagogical press see in the (American) "Educational Review," February, 1900, article by M. G. Compayré.

the country districts, and have not the same hankering to get into the towns as with us, owing largely, no doubt, to economic reasons. This method of passing from country to town and back is by no means absolute. The training college brings the teacher from the very start into close connection with the authorities. The head of the normal school communicates his opinion of his old pupil to the academy inspector when any appointment has to be made, with the result that a candidate whose aptitudes, manners, and idiosyncrasies seem to render him suitable for a town post is not sent to rusticate in the country. These appointments nearly always follow within twelve months of the pupil leaving the normal school, though sometimes the supply of posts does not come up to the estimate. In one department I found there had been some difficulty in placing all the pupils of the year, but the difficulty had been solved by sending the surplus into the neighbouring departments.

The *stagiaires* thus placed are carefully studied by their inspectors, so that every man is more or less marked, and when any vacancy occurs the *inspecteur d'académie* in departments in which the supply of pupil teachers is adequate is not obliged to propose to the prefect to lay violent hands on the *premier venu*, but has always in his mind's eye a teacher whose previous antecedents seem to suggest his suitability for the vacant post. This almost paternal oversight may, of course, be overdone; but it must prove a rare stimulus for a teacher whose heart is really in his work to know that he can always look for approbation, encouragement, and even reward, to the powers that be, and that there is at least one quarter in which his efforts will not be lost sight of. One feels inclined to attribute to the close association between governor and governed the *esprit de corps*, the devotion to his duties, and the acceptance of his school functions in their largest and widest sense, with which no impartial observer of French primary teachers can fail to be struck, more especially if he be acquainted with traditions which prevail in French secondary education. The humblest teacher in the most out-of-the-way hamlet, acting as it were as the pioneer of new ideas and new traditions, often in the midst of open indifference or covert hostility, feels that he has got a whole Ministry behind his back, just as the lonely sentinel feels that he has in his rear an army of his own friends. And this undoubtedly in many difficult and trying occasions gives him a courage and a constancy which it would be impossible to expect in an isolated teacher living in an unfriendly or even hostile district not only geographically cut off from the main centres of enlightenment, but with no sure means of communication with or expectation of support from the headquarters to which he belongs.

How bitter and trying these experiences may sometimes be is best seen from a few examples culled at random from the numerous monographs by teachers exhibited at the Exhibition. Many of

Position as
regards the
religious
question.

these persons were practically sent to open up to education districts that hitherto have been without a school. Others had been appointed to lay schools which had just been established in the place of the religious ones which still existed alongside. The adversaries of the school in one village put about statements that the lay teachers strangled their pupils. In other communes the parents, under threat of extreme ecclesiastical penalties, withdrew their children *en masse*. In others the new teacher (sometimes a woman) was received with a shower of stones.* Other teachers, again, found themselves boycotted. The local grocer and provision merchant refused to supply them. They could get neither flour nor milk on the spot. *Si vous envoyez mon neveu ou ma nièce à l'école sans Dieu, n'attendez rien de moi ; ma congrégation sera mon héritière*, said a rich aunt to her relations, and the parish council of the place passed a resolution deploring *être obligé par une loi scélérate à entretenir une école de perdition*.

These are, of course, extreme cases, and it is pleasant to find that in the departments under observation the religious feeling has greatly abated. Thus at one place, a Catholic stronghold, which I visited, the opening of the school was greeted by violent attacks from the pulpit, but these have now ceased. In some villages, however, the war goes on in a modified form, the *curé* using his influence to withdraw the children from the school during the period of preparation for the first communion. But this is by no means universal. Many teachers expressly told me they had no trouble. Each party has decided to go his own way, and each has found in the end that he has enough to do. In some cases I even found the teachers and *curés* on friendly terms. One teacher mentioned to me with evident pleasure that last year, for the first time in the fifteen years he had been at the school, the *curé* came to the prize-giving. An academy inspector also assured me the religious difficulty was not very great. In fact, if there was any trouble, the religious party came to see him, and he generally managed to find a way out, despite one or two Hotspurs on either side. This opinion was further confirmed by a primary inspector, well spoken of by both parties, who said to me that perhaps Jules Ferry went too far ; that had he allowed the *curé* to enter the school in order to teach the catechism to those whose parents wished for it, the result would probably have been peace in the long run. For if the *curés* could have given up their schools with honour they would have done so long ago, as they constitute a very heavy drain on the clergy, despite the *commission diocésaine*.† And again, as another inspector, in one of the most Catholic departments I visited, said, any attack on the primary school would be *mal vu* by the population in general. All of which seems to indicate that the teachers' position as regards the religious question has greatly improved.

* My authority in this particular instance was a high official.

† See also note on page 149.

Position in
the village

In former times the teacher was more or less under the thumb of the *curé*. He was obliged to sing in the choir, and also to put his children into it as well. The whole tendency of the Ferry legislation was not only to render him independent of the Church, but also to establish him as a sort of lay rector of the parish, round whom not only scholastic but social enterprise should centre. But if the fact of being paid by the State renders him to a certain extent independent of the locality, he none the less finds himself in actual practice generally closely associated with it, through having to act as secretary to the *mairie* of the commune.*

Secrétaire de
la mairie.

Every commune in France is obliged to possess a *maire* and a *mairie*, even if its population be composed of only fourteen persons, which is the actual size of the smallest commune in France. Each commune is further obliged to have a secretary to carry on its clerical work, and as in many instances the teacher is the only "scholar" in the place, he is appointed by the mayor to the post, of course only in those cases in which the post is a stipendiary one. In the *arrondissement* of Vire, in Calvados, there are many communes in which there is no salary attached to the secretaryship. In these cases the mayor is obliged to act as secretary himself or pay someone out of his own pocket to do the work. In the small towns where the work of the secretary is too great to be carried on by the schoolmaster, a regular official is appointed, and in some of the smaller communes a reactionary majority will sometimes appoint a religious teacher, if there is one available, but even when a reactionary mayor is elected he rarely dispossesses a teacher already in office. How widespread the practice is may be seen from the fact that in the *circonscription* of Bayeux, 92 out of the 95 male teachers are secretaries to the mayor. In many communes where there are no male teachers, the female teacher is appointed to the post; and I came across more than one of these lady secretaries who seemed to give quite as much satisfaction as their male colleagues.

The pay and duties vary a good deal. Some of the teachers I came across only received 100 francs a year. The ordinary figure seemed to be 150, but in some cases the salary was 350 and even 380 francs. The work in some instances came to only two hours a week; in others it was as high as two and even three hours a day. It is obvious that in some cases the teacher's time is considerably taken up with his secretarial duties. The academy inspector of Loir-et-Cher, in his report of 1899, goes so far as to say that the teachers are crushed by this work at the *mairie* (*accablés par la besogne*). More than one teacher complained of the work, and looked on the money as well earned, as the salary has remained stationary, but the work has increased. There are so many more papers to fill up nowadays. Another objection against the system was that

* The system is not due to the Republic. When Matthew Arnold visited France, in 1859, he found it in full swing. (M. A., page 82.)

it brings the teacher into too close contact with politics. The wife of a teacher in a commune where party feeling runs high said to me the position was extremely difficult, but her husband so far had steered clear of being classed with either party.* One or two similar complaints were also made to me. Against this I could set the records of the teachers themselves. In the very *circonscription* of one of these grumblers I was told by the inspector he had scarcely ten complaints a year against the 240 teachers under him, and these were nearly always unfounded. If, then, the teachers have to exercise some diplomacy, they are evidently equal to the task. It might also possibly be a mistake to free the teachers from *all* local control. Nor was the testimony entirely one way. One teacher who was not favourable to the system was forced to admit that it helped him to get all he wanted for the school out of the commune, and another stated that it certainly enabled the teachers to obtain much more out of the local funds than they otherwise could get. In fact in the hands of a skilful teacher it probably serves more as a help than a hindrance. Its most serious defect is the claims it makes on the teacher's spare time.

The above remarks apply *pari passu* to the female teachers. That the position is a fairly satisfactory one is proved by the fact that not a few teachers told me they intended to put their daughters in the profession. As one mistress said to me, it is by no means a bad career for women, if they had not to wait so long before earning anything. Despite the girls being boarded free at the *école normale*, many parents cannot afford to allow their children to remain so long without work. Another teacher said it was the only calling a girl can follow with the exception of the *postes et télégraphes*, if she does not wish to be an *ouvrière*. Those who are sent into the villages as the head of a girls' or mixed school are doubtless subjected to a minute study on the part of the inhabitants. *Les mauvaises langues* (for there are gossips everywhere) do not spare them. But once the period of probation is over, the newcomer settles down and finds herself accepted as a "full member" of the village community. Another advantage is that they can marry without losing their place. Many marry teachers, but others I came across were married to persons unconnected with the profession. According to the directress of the normal school at Caen about half marry; the directress of the normal school at Le Mans estimated the number at a third. In any case, there are no joint salaries as with us, so that the married woman always obtains the full market value of her services.

The position of the assistant in some of the large schools seems to be a cause of discontent. The director in some cases appears to possess a certain

Position of
the women
teachers.

Position of
the assistant.

* I myself was able to judge, in a way, of the extent of this political feeling, as I commenced my inquiry in the middle of the general election for town and parish councils, in April. In some places, as was natural, there had been some feeling, but this was not the case, at least, in one commune where 156 votes were cast for 64 candidates.

amount of the military spirit, and treat the older assistants as if they were still *in statu pupillari*. Such an autocratic régime breaks all spirit of initiative in the teacher, and makes him a sort of scholastic automaton. These facts are taken from a report on overwork addressed by M. Achille Deum to the teachers of the Seine. The report also recommends that the head teacher should regard himself not as a chief among his soldiers, but as a collaborator among collaborators. No doubt the most practical system for realising this ideal is that of friendly weekly or fortnightly reunions of the staff, such as are common in Germany, a notable example of which I came across at Alençon, where the director of the Ecole d'Application told me he found the system of great use. The report in question goes even further, and suggests a pedagogical referendum, which, however, seems rather unsatisfactory, as the votes would be counted and not weighed.

(iii.) RECRUITMENT.

Recruit-
ment.

It has already been stated that about seven-tenths of the teachers have had a normal education, but the training colleges are quite large enough to accommodate sufficient pupils to supply all the primary schools, and it only rests with the Minister of Public Instruction, or rather with the Ministry of Finance, to see this number is attained. As it is, the deficiency is made up by taking on the holders of the *brevet élémentaire*, such as students who have failed to enter the normal schools, or even religious teachers who have left their orders. Such persons, however, cannot attain the maximum salary of the profession. This shortage in the supply of trained teachers has caused some alarm in some quarters; and certainly it seems somewhat of a piece of false economy not to utilise to the full the splendid normal schools that have been constructed at such regardless expense.* In some of the departments—as, for instance, Calvados—there was a balance of normal pupils waiting to be placed; but in Sarthe I was told that between one-third and a quarter of the female teachers have to be taken from outside the school. On the other hand, the male supply of teachers in Sarthe is sufficient. It is only fair to those who frame the estimates of the numbers required in the men's training colleges to state that a certain number of their pupils do not after all enter the teaching profession, more especially those who remain in the Army after completing their year of compulsory service. These ex-students are required to pay up the cost of their keep during the three years at the normal school; but after attaining the rank of sergeant they present themselves for the examination of sous-lieutenant, and, if they gain their epaulettes, on their retirement probably receive a post of receiver of taxes, which is better pay

* According to the Rapport E.P., this shortage in supply is due to the cutting down of the vote for normal colleges, which, in ten years from 1890-1899, has been gradually diminished by something like £60,000, though the votes for all other branches have shown an almost uninterrupted increase from year to year. The result is that "almost everywhere" the Academy Inspectors have been obliged to complete their lists of *stagiaires* by taking persons who have not been at a training college. In some departments the number of these "outsiders" reaches and sometimes exceeds 50 per cent.

than that of a schoolmaster. One person with whom I conversed on this point put down the leakage through this channel as high as 10 per cent.

During the last few years the number of aspirants has fallen off in a marked fashion in some departments. I questioned a good many people in the matter, which is a very serious one, and the majority seemed to think that the real reason was not anything to do with a distaste for the work, or owing to the profession becoming less attractive, but rather for economic reasons, brought about mainly by the ranks of the teachers being so encumbered as to render promotion slower than it was, many teachers being obliged to remain in the "probationer" class even after passing their *certificat d'aptitude pédagogique*. This lack was most noticeable in Orne, where in 1898-9 the authorities had to ask the Ministry to allow the age of candidates for the *école normale* to be extended—i.e., to permit them to admit pupils under sixteen or over eighteen. The dearth of male candidates is shown by the fact that in 1873 and 1885 they numbered 59 and 53 respectively; while in 1896 and 1899 they had dropped to 21 and 23. In Loir-et-Cher the bottom seems to have been reached: in 1899 there were 23 male candidates against 20 the year before, and 32 women candidates against 29. In Indre-et-Loire (1897) the number of aspirants was sufficient (20 for 11 places), thanks to the higher primary schools of Amboise and Tours, which prepare for the normal school. At Le Mans normal school for women there was formerly a deficiency of candidates, and recruits had to be beaten up out of other departments; now the department alone sends up about 33 aspirantes (1898). The male normal college also had sufficient candidates (27 for 13 places); in fact, two of its candidates were drafted off into other departments.

This apparent decrease in the number of candidates is confirmed by the official figures given in the official *Rapport sur l'Enseignement Primaire*. The maximum number of candidates was 5,969 in 1882; it fell to 4,564 in 1887, and next year there was a further drop to 2,790, descending to as low as 2,096 in 1891. In 1897 it had again risen to 3,151; but the rise has not been maintained, and it now stands at 2,778. *Per contra*, the number of women candidates has constantly increased since 1888, when it stood at 2,680, and is now at 4,438 (1899). It is interesting to note that the *Rapport* elsewhere ascribes the falling off to the block in promotion and the superior attractions of a commercial career.*

Another reason often given was the establishment of the one year's service for teachers, who were until recently exempt. Formerly the sons of rich peasants entered the normal school in order to avoid entering the Army. But as they have now to serve in any case, they would just as lief serve three years as one. As a rule, these worthy persons only stayed in the profession till they had inherited their father's estates, when, having served for the legal

period, they at once retired. The loss of this contingent cannot, therefore, be a very serious one.

A third reason for the falling off of the candidates is the raising of the standard of admittance. Up to 1885 normal pupils went in for the *brevet élémentaire* after entering the normal school. It is now required as a necessary qualification for entrance. (See Appendix I.)

which
la. The great majority of teachers are educated in the elementary or higher primary schools, which now often make an object of preparing pupils for the examination.* Few candidates come from the secondary schools, and they are not, I am told, very welcome. One is afraid of them: they have not the same spirit of devotion, and are too ambitious.

which As regards the class from which the teachers are taken, it seems to be largely the same as that from which the *curés* are drawn. The majority are the sons of peasant proprietors, or of the teachers themselves. M. Trabuc, the Primary Inspector at Caen, estimated the first category at 70 per cent.; and at Loches, M. Marischal, the Director of the Normal School, kindly provided me with the following statistics of the parentage of his pupils for the three years 1898-9, 1899-1900, 1900-1:-

Cultivators	-	-	-	-	7	10	7
Teachers	-	-	-	-	6	8	10
Railway and State employés	-	-	-	-	5	5	2
Tradesmen	-	-	-	-	-	3	6
†Artisans (wheelwrights, carpenters, tailors, masons, etc.)	-	-	-	-	12	9	12
					<u>30</u>	<u>37</u>	<u>37</u>

The great majority seem to belong to fairly well-to-do families. M. Quénardel, the Director of the Normal School at Caen, told me, despite his seventy-two pupils, he had some difficulty in distributing the money (160 francs) placed at his disposal for aiding necessitous students through the lack of suitable candidates. The director of the men's college at Le Mans also informed me that nearly all his pupils come from the country, and very few from the towns.

which
la. It is very curious to note the region from which the candidates of any normal school are drawn. Although the competition is open to all France, the candidates, with a very few exceptions, belong exclusively to the department in which the college is situate. Thus in Calvados practically the only outsiders who ever present themselves come from the neighbouring department of Manche; and in the other departments under observation the same result was confirmed by the directors of the various training schools.

* This does not, however, please everybody. M. Doliveux, Academy Inspector at Beauvais, writing in the *Revue Pédagogique*, says: "We oppose, and rightly, the view that our higher primary schools should serve as the nursery of our normal schools."

† A part of the latter category are also proprietors of a plot of land.

On leaving the *école normale*, the teachers are equally anxious to settle down in their own department, and, if possible, near their native place; in fact, they look on being sent into a neighbouring department, or still further afield, unless it be part of their *pays*, as something more or less like exile, and are always hankering to come back. The principle seems to be pretty widespread in France, for, according to the Director of the Normal College at Alençon, who had been primary inspector in Haute-Savoie in his time, the teachers in the mountain district did not wish to come down into plains, nor were those in the plain willing to go up into the mountains.

Homing
instinct of
teacher.

It had been represented to me by more than one person that the departments were still little more than geographical expressions, and that the real divisions of the country were the old *pays* that existed before the reformers of the French Revolution carved France up into departments. The statement, I think, is scarcely accurate to-day, and is likely to be less true in the future.

The growth
of a depart-
mental
spirit.

Allusion has already been made to the different educational physiognomy presented by each department, and the credit of it attributed to the academy inspector and those under his orders. But this growing differentiation is evidently largely aided and abetted through the normal school being made the unit of primary education, from which the teachers, as they go out into the four corners of the department, formed as they are on a common norm, must, since they deal with the rising generation, not only profoundly modify its manners, customs, and ways of looking at things, but likewise impress it with a certain unity of life and thought which may be described as departmental. Thus, strangely enough, it seems reserved for the primary teachers, whom an impartial philosopher might call the real children of the Revolution, to give life and personality to the administrative entities into which their spiritual forefathers re-divided France one hundred years ago.

And as a corollary to this homing instinct of the teacher, it is further interesting to note that whereas in England the inspectors remain as a rule in the same place, and the teachers migrate with the greatest ease from Cornwall to Cumberland, in France the case is exactly the reverse. The inspectors move about, and the teachers, locally speaking, remain on the spot. There is something to be said for the view that both parties are probably gainers: the inspector widens his experience, and the teacher gets to know his own folk in a way that no stranger can hope to. On the other hand, this constant transplantation is somewhat a hardship on the inspector's family; and if the inspectors change "circuits" too frequently, the schools and teachers alike suffer.

Contrast
with
England.

(iv.) THE CERTIFICAT D'APTITUDE PÉDAGOGIQUE.

The *stagiaire* is always appointed by the academy inspector. After two years' experience of teaching, he or she can present

Condition
examinati

themselves for the examination for the *certificat d'aptitude pédagogique*. Some present themselves many times. I came across one successful candidate who had taken eight years to pass, and I even heard of instances of some who had taken ten years. The examination is divided into three parts. First there is a written composition on some pedagogical subject. If the candidate passes this, he or she is *admissible*, and at a later date gives a specimen lesson before an examining commission composed of an inspector and two teachers, a female teacher being always a member of the commission if the candidate is a woman. Should the commission consider the lesson satisfactory, the candidate is recalled and subjected to a *viva voce* on her lesson, with a special interrogation on the uses of the school register and the regulations. The candidate on passing the final ordeal, is admitted, but not placed on the list of regular teachers till a vacancy occurs; in this way candidates are sometimes obliged to wait some time owing to the block in the promotion list. The following is a rough *résumé* taken from notes of the two examinations at which I had the privilege to be present. Although very incomplete, it is to be hoped it may give some slight idea of the seriousness and scope of the examination.

"The commission board consisted of three inspectors and a head female teacher. Fine class-room, airy and lighted on three sides. The candidate young, pleasant-looking and intelligent. Twenty-seven children, average age about eight. Examination began at 8, with reading and explanation of the harder words, followed by the correction of a composition. At the interval children file out singing, the teacher starting them. After the interval lesson in *la morale*. Children well taught, but lesson tending to become too much like a catechism lesson, answers too stereotyped and the 'front-bench' children too much questioned. The first part of the lesson a revision, the second part new. Examine *cahiers*,* writing neat and good. Lesson on duties to animals: killing them wrong. Weak explanation. A little slang (*ordrée*). 'The history of a toad and a donkey.' Impossible story. The modern fable, like the modern fairy story, always a 'little wooden.' Too much 'make-up' about it. Children are dismissed, and after a short confabulation, teacher is summoned for the oral examination, which is on the lesson she has given. The first question very much to the point. 'What, mademoiselle, would be the criticism you would pass on your own teaching?' The questioning inspector then points out the lesson was too full. The teacher enunciated too many truisms. Bad trick of correcting the pupils' expressions by repeating their answers in a revised form instead of making them polish them themselves. Language requires a little cultivating. Down on *ordrée*, which examiner took to be a provincialism, formed from *ordre* (tidy). [It is certainly a provincialism, but, as a learned friend pointed out to me, it is probably the Norman pronunciation of

* Signifies a combination of copybook and notebook.

au droit. In Normandy the 'oi' is still pronounced as in the time of Corneille, who constantly rhymes the syllables 'oi' and 'ai.' It is curious to note in this connection that the French word *voie* is pronounced in Normandy almost exactly like its English derivative 'way.']. Candidate was asked to produce her *carnet de morale*; her method of teaching drawing on slates criticised adversely; lack of sufficient concreteness in teaching multiplication; must make the children speak louder. The examination then passed to the administrative side. The probationer was asked how to arrange an elementary school with one teacher, so as to set all the school working at once. She would take the upper class in reading, set the lower down to a composition on what they had read, and hand over the little ones to the monitor. (The interesting question of monitors who have no official sanction will be treated later.) The lessons common to all would be the object lesson, *la morale*, and the singing lesson. The rôle of questioning was defined as a means of ascertaining what the pupil knows, and the use of the *cahier de roulement* (copy-book in which each pupil in the class copies a lesson in turn) was to excite emulation among the pupils. The teacher then retired, and after a short deliberation was 'received' with very good marks, having had 14 out of 20 for the *écrit*, 9 out of 10 for discipline, 8 out of 10 for teaching, 6-7 for the *cahier de roulement*. The notes of the directress of the school, which are always taken into account, were equally favourable. The inspector's verdict: 'A good teacher, who knows how to profit by what is said to her.'

The other examination was in Sarthe. The following are my notes and impressions:—

"Teacher at the head of a class of infants from 6 to 7 (*classe enfantine*). Class-room too small for children. Commission composed of inspector and a male and female teacher. Probationer has 16 at the *écrit* (a good mark). Arrive only in time for oral. Candidate very confident. Inspector does not appear to share her feelings. Reading lesson badly chosen. Should not blindly follow the book straight through, but select passages most likely to interest the class. Questions on the *pros* and *cons* of simultaneous reading. Inspector shows how she should dovetail the reading in with the *morale* or other subjects. To render lesson really interesting, teacher should first read paragraph through and explain it, then let them all read it over together. Bad habit of interrupting a child in the middle of its reading to ask a question. Explanations only half given; errors of pronunciation: *rabour* for *labour* (common error in the country).

"*Geography*.—Candidate began by asking the four cardinal points, should have connected them with the sun. The need of illustrating by concrete examples. Teacher should make use of pictures, should draw a simple plan of the school on the blackboard, and from thence go on to a simple plan of the town (do not say 'hourg,'

that will offend the people's susceptibilities). Language too high flown, such as 'the town council safeguards the interests of the town' (*veille aux intérêts*). In writing and reading choose words to put on the blackboard that have some connection with one another (all this suggested to the candidate in a very kindly fashion. Nothing Draconian about the inspector).

Drawing.—The zigzags drawn on the board too abstract. Convey nothing to a child's mind. Must try to give drawing a concrete meaning. The *travaux manuels* (cardboard work folding) quite mechanical; no attempt made to excite the children about what they are going to do. No questions as regards colours, and yet six children out of ten cannot distinguish between blue and green.

"Need of forming a school museum with the offerings of the class. Objects indispensable for object lessons. When treating of the cow, should ask for a morsel of leather from the cobbler's daughter. The leather would furnish a new point of departure for a lesson on leather. Inspector finally asks questions on the documents essential to the conduct of a school. Candidate preserves her serenity to the last.

"*Deliberation.*—Inspector unwilling to admit candidate; opposed by the two teachers, who urge extenuating circumstances. Probationer only four months in present position; the directress's notes good; the class rather difficult to manage, owing to the *locale* being inconveniently small. Inspector gives way with good grace, and candidate admitted with the bare minimum of marks necessary. It appears that candidates are rarely ploughed at the oral. The probationer, owing to the mediocrity of her performance, not called in to hear the results of the deliberations, but on going out the female commissioner puts her out of her misery by telling her she has passed."

(v.) APPOINTMENT AND TENURE OF REGULAR TEACHERS.

The appointment of the teacher is, as we have seen, made by the prefect on the proposition of the academy inspector, and any other move, whether voluntary or not, on the part of the teacher is consummated by the same authorities. Not a few persons I spoke to seemed desirous of taking the appointment out of the prefect's hands and vesting it in those of some more purely educational authority.* The proposition, however, to substitute the rector in his place met with little acceptance. The latter, owing to his multifarious duties, is not sufficiently in close touch with the teachers themselves. The person almost universally designated was the

* The idea, of course, is to get rid of all political influence. Such a move, on the face of it, has much to recommend it; yet if one looks ahead one cannot fail to have misgivings at what looks in the long run like the creation of an educational "caste," who are solely responsible to the nation through the minister, and might conceivably from the lack of local control get as much out of sympathy with the locality as ecclesiastical systems have in certain countries.

academy inspector, with or without a special council to assist him. The suggestion is interesting as showing the high opinion the teachers themselves entertain of the academy inspector, and of his impartiality, which induces them to desire to see the delicate operation of promotion committed to his charge, and confirms one in one's conviction that he is the real pivot round which primary education turns.

But even under the present conditions of appointment and tenure the French teacher may well be the envy of his English colleagues. The *déplacements d'office*, or forced moves, are rare, and except where the teacher himself is to blame, a subvention towards "moving expenses" is granted. Even when the French teacher was paid by the local authorities his position was more secure, for he was not appointed either by the *municipalité* or the *curé*, whereas the English teacher is absolutely in the hands of the school managers or the local board. It will be probably long in England before the teacher becomes so entirely a functionary of State as in France. In fact, in spite of certain centralising tendencies, we are still more likely to throw more and more control into the hands of really big local authorities; but this should prove no bar to the creation of a closer connection between the teacher and the central authority, in the shape of some central tribunal for defending his rights against unjust dismissal, to which he may always have recourse. Were there such a central tribunal of appeal, the majority of cases of unjust dismissal which occur in England would certainly not occur at all, as the mere fact of such an appeal existing would prevent the flimsiest of them from coming to a head.

(vi.) SALARIES, PROMOTION, AND PENSIONS.

In the matter of salaries, teachers are divided into five classes, *Salaries*. the *stagiaires* being in a class by themselves. The latter start on 900 francs, the other classes being paid as follows:—

	Male Teachers.	Female Teachers.
5th Class	1,000 francs	1,000 francs
4th Class	1,200 "	1,200 "
3rd Class	1,500 "	1,400 "
2nd Class	1,800 "	1,500 "
1st Class	2,000 "	1,600 "

Each class is supposed to contain a percentage of the whole body, *Recent* *stagiaires* and *titulaires*, hence the term "*la pourcentage*." Last ^{reform.} year a considerable reform was effected in the percentage under which the number of teachers in each class had been proportioned, as follows:—

Stagiaires 15 per cent. ; 5th class 25 per cent. ; 4th class 25 per cent. ;
3rd class 20 per cent. ; 2nd class 10 per cent. ; 1st class 5 per cent.

Under the new regulations the *stagiaires* have been reduced to 10 per cent., and the 5th class to 20 per cent., while the 3rd has been augmented to 25 per cent., and the 2nd to 15 per cent.

The reason for the new reform was the block in the promotion of the lower classes, which was affecting the supply of candidates for the normal schools. This congestion in the lower grades was really caused by the block in the upper classes, in which a number of teachers were unable to be retired owing to the insufficiency of funds voted for that purpose. The matter was complicated by the very intelligible reluctance on the part of the authorities to enforce the retirement of teachers who, after bearing the burden and heat of the day, had just arrived at the first class. As an instance of the *encombrement* that prevailed, the case was cited by the *Journal des Instituteurs* of a teacher of seventy-two who was still in active service, under the amusing title, "*Mathusalem maître d'école!*" Already in March, 1899, the Government had attempted to reduce the block in the higher classes by voting 1,200,000 francs, which sum was calculated to allow for 1,100 new pensions. This raised the number of promotions for the year to 10,470. The reform of the present year (1900) has gone far to satisfy the claims of the teachers. In order to effect the revision of the *pourcentage*, the Chamber voted 3,811,200 francs for the increase in salaries, and 1,200,000 for pensions. It is calculated that the former will allow of 16,000 promotions, or with the vacancies caused by the new pensions, 21,500.

Perhaps grumbling is rather an Englishman's privilege, but what struck me frequently about the teachers was their lack of discontent with their position. Certainly, some of them found it difficult to make ends meet, but it did not seem to embitter their whole existence. I took the trouble to inquire into the years of service and class of most of the teachers I met. To take only two instances among many. At Mauvaisvilliers I came across a teacher who was only in the 5th class with 14 years' service. At Chauffour I came across another who was no further advanced, and had 15 years' service to his credit. Yet neither of these men could be said to have lost interest in his work.

methods of
promotion.

Great care is exercised in drawing up the list of candidates for promotion. First, the primary inspector prepares two lists, one for promotion by merit and the other by seniority. The academy inspector revises these, and presents them to the *conseil départemental*, which, with the assistance of its president, the prefect, draws up the final list. These are transmitted to the Minister, who fixes the number of promotions to be accorded to each department according to the *pourcentage*.

recent
changes.

The present system is due to a decision of the Conseil d'État, on a law which, on the face of it, seemed to assign the right of promotion to the department. In fact, as one inspector jokingly said to me, the point to be decided seemed rather a grammatical than

a legal one, and in such a case the Académie Française would have been the more competent tribunal. The decision was probably dictated by the desire to make a sort of army list out of the teachers, and, above all, to preserve a sort of symmetry in the number of promotions from each department. But, judging by the amount of dissatisfaction it has provoked, the new departure has not altogether been a success. It is probable that a return to the departmental method of promotion would be hailed with delight, especially if it were accompanied by a method of promotion in which there was a seniority limit for advancement.

One of the main subsidiary sources of income for the heads of schools in rural districts is the emolument attached to the duties of secretary to the *mairie*, which has already been discussed. In Sarthe, which is one of the richest departments in France, the teacher has not infrequently the chance of adding to his income by becoming cashier to the local branch of the Caisse d'Epargne. I came across one or two of these fortunate individuals. In one case the salary was 300 francs a year. The duties consisted in sitting for two hours "at the receipt of custom" on Sunday afternoons, with two hours for making up the books in the evening, as well as the ordinary balancing at the end of the year. Another small source of income is the subvention occasionally voted by the commune to carry on the evening continuation school. This, however, is not always the rule, even where schools have been started. In many cases teachers give their services for nothing, and even pay for the lighting and heating out of their own pocket. There is little doubt, if the present enthusiasm is to be utilised, the evening continuation work must be put on a sound financial basis, and this is what some of the authorities are trying to do. M. Meslet, one of the primary inspectors in Sarthe, told me he had secured subventions from the communes in his circonscription to the amount of 6,000 francs. The biggest sum was 100 francs, the ordinary amount being 50. It is worth noting that the total amount voted for this purpose in Sarthe was 12,706 francs in 1898-99. Still, this source of revenue cannot be looked on as very serious. The total amount raised in 1898-99 in Sarthe from all sources was 15,986 francs for 311 *cours*, which works out at about 50 francs per teacher, assuming in this case that each *cour* represents a single teacher, which is under the mark, as I came across one in which no fewer than four teachers took part. Again, in 1897-98 in Indre et Loire 143 teachers earned 12,966 francs in the night schools between them, which works out at about 90 francs a head. This does not leave a very formidable balance when heating and lighting have been paid for, especially as the cost of organising the recreative evenings also falls on the teacher.

All teachers have a right to lodging allowances, where no house is provided. There is further an *indemnité de résidence* for those who live in places over a certain population, which begins with

100 francs and rises to 2,000 francs in Paris (for directors and directresses of schools). Ordinary teachers receive half the *indemnité* and *stagiaires* a quarter. The heads of schools with more than two "classes" get an extra 200 francs a year. In one or two places I came across instances where the teacher was receiving an extra indemnity from the commune. This is, however, a pure act of grace on the part of the local authorities. A further receipt in kind is the privilege that teachers possess to have their sons educated free in the secondary schools.* They also have the right to travel by rail at half the usual fares.

Attempted
comparison
of French
and English
salaries.

It is somewhat difficult to compare the salaries of French and English teachers, as only rather more than a quarter of the English male teachers and about one-eighth of the female are provided with residences free of rent. But whereas the average salary in England of a certificated master is now £127 2s. 7d., the English master is evidently higher paid than his French *confrère*, for the latter in the top class only receives £80, which, even with allowances for rent and the various other small sources of revenue, can never amount, except in the large towns, to anything like this figure. The same is true of the English female teacher. She receives on an average £85 9s. 1d., whereas the French mistress in the top class has only £64 from the State, and in a country district, with rent accounted for, and adding in the various extras, she can only hope to reach what is the average salary of the English teacher. Or, to put it roughly, the highest paid teachers in France are only earning (Paris apart) the same salary as the average paid teachers in England. Yet owing to the great variation in salaries in England, there are some rural schools in which the teachers are no better paid than in France. There is a pamphlet called "The Neglect of Village Education," kindly given me by Dr. Macnamara, M.P., compiled from statistics sent in by 1,421 schools. Out of this number there were 7 schools in which the teachers' salaries were under £50; in 24 the teachers only received £50; in 213 the salary was under £75; and in 380 it was under £100. These are probably more or less exceptional cases, but they none the less illustrate the inequalities which prevail. Any comparison, again, between French and English salaries must take into account, not the cheapness of living, which is probably much the same in the two countries, but the standard of comfort and style of living, which are certainly higher in England. This difference is faithfully reflected by the low average of remuneration received by State functionaries in France in comparison with the salaries of our own Civil Service.

A few figures on the cost of living may not be out of place here. The price of beef at Paris is 2 francs 60 the livre for the prime parts without bone (*le rôti*), or about 1s. 10½d. a pound (English). The *morceaux accessoires* without bone (French meat is cut up differently to English) cost about 2 francs the livre, or about 1s. 5½d. a pound (English). In the country, the average price

* Loi de finances, Article 29 (1900): "The benefit of free education in the *national lycées* and commercial colleges is accorded to the sons of public teachers."

in Normandy is, bone included, 1 franc 40, or 1s. a pound (English), or about 10½d. a pound (English), bone included, for habitual customers. Bread in France is the same price everywhere. The Minister fixes the price every month. The mean price at Paris is 35 centimes the kilo, or 1½d. a pound (English). The price is regulated by means of a sliding scale on the wheat imported. Protection, therefore, has one use in keeping the price of bread steady. As a friend of mine said, cheap bread has saved the Republic, since there has never been a scarcity since its establishment. The price of bread is for many peasants the capital question at market, for the French eat far more bread than we, some peasants regularly getting through their two livres, or two pounds and a quarter a day.

Mention has already been made of the tendency of the teachers to remain in one department, and even in the same neighbourhood, and the tendency, though due in the first place to the teacher's attachment to his own locality, is largely favoured by the system of salaries, which makes the amount depend on himself and not on the locality; and thus there is less of that hunting for the prizes of the profession which often provides the towns with their best teachers at the expense of the country. In France there is nothing to prevent the little struggling community of 200 souls from having a teacher who is fully capable of taking a town school if needs must be. In fact, I was assured by at least two inspectors of the apparent paradox that the best teachers are not to be found at Paris; but whether the statement is true or not, it is a remarkable indication of the high standard of the country schools.

Teachers, being classified as functionaries, acquire the right to demand their retirement at 55, if they have 25 years' service to their credit. The years passed in the normal college over 20 years of age count in with the duration of service. The rate of pension is based on the average of the last 6 years of the teacher's salary. For 25 years' service the pension is reckoned at 50 per cent. of the average, with one-fiftieth for every year's extra service. The pension cannot be lower than 600 francs for a male teacher and 500 for a female teacher or directress of a maternal school. One of the teachers' associations that I came across in Sarthe has expressed the desire for the absolute right of retiring after 25 years' service, at 45 years of age, with compulsory retirement of all members at 55. The first figure of 45 will, I am afraid, long remain an impossible ideal, not only in France, but also in all the civilised countries of the world. In the same number of the Society's bulletin which contains these propositions (February, 1900) there appears a study by M. Bénard which enumerates the desires formulated by the Solidarité of the teachers of the Seine. They likewise desire a pension after 25 years, with proportional pension in the case of retirement for ill-health after 10 years of active service, continuation of pension to widow with allowance for children; and compulsory retirement at 60. The most interesting feature of these claims is the plea for the widow and orphan of the teacher.

(vii.) HOUSING, LODGINGS, WATER, DRAINS, GARDENS.

Housing.

The housing question has been made so much of in England (see "Education in Country Districts," reprinted from the *Manchester Guardian*), that I made it my duty to inquire very carefully into the housing of the teachers and learn from their own lips their sentiments on the subject.

The teacher's house, generally speaking, forms part of a block along with the school class-rooms and the *mairie* of the commune, the latter often consisting merely of a single room. One of the most common forms is that of the *mairie* in the middle, with the school on one flank and the teacher's house on the other, or, if there are two schools in the place, they are often to be found at either end of the building. Sometimes, however, they are at some distance apart. The best type of school, according to one inspector, although I saw but very few specimens of it, was one in which the teacher's house was separated from the school-building by a playground. The inspector explained that this arrangement saved the female teacher from the temptation of trying to spend her time between the schoolroom and her kitchen.

Three
building
epochs

There are, roughly, three principal epochs in the history of the building of the French schools. The first, which dates from 1833, was mainly concerned with the erection of boys' schools. The second, which begins with 1850, was taken up with the construction of girls' schools; and 1880 marks a period at which many schools were built or re-constructed. It thus happens that those communes which have longest enjoyed the advantages of education have the oldest and least convenient premises. This was specially noticeable in the canton of Alençon, in Orne, where several of the schools are only one storey high. I was enabled to get a complete idea of all the schools in the canton through the kindness of M. G  rier, the *Econome* at the Normal college, who showed me a collection of fifty photographs he had taken in view of the Exhibition. Of these schools about a third were "appropriations," or houses adapted to school use. In some cases a second story had been added. Most were built of stone, but in the neighbouring *arrondissement* of Domfront brick houses are more frequent.

Houses
seen

According to the law of 1893 and the decree of 1894, teachers' houses in communes under 12,000 should contain four rooms.

The following are my notes on some of the teachers' houses I saw. (Of course, on many occasions I did not record my impressions, especially after I found the question anything but a burning one.)

"B.—Four rooms, of which two are bedrooms. New building.

"N.—Four rooms in new house: fine parlour, big kitchen, two good bedrooms with attic for adjoint. Teacher showed me over house, which is nicely furnished, with evident pride.

"Inspector stated teachers in his *circonscription* were well housed. Only in about one-tenth of the houses the teacher was a little pressed for room.

"Houses always water-tight. Whitewashing generally done every two years.

"The painting the matter in which the commune is most niggardly.

"Teacher has good kitchen, sitting-room, dining-room, with three bedrooms.

"M.—House big, but not well arranged; teacher, however, content.

"Secretary to Academy Inspector said teachers well housed.

"St.—An old château as school house! Teacher does not live there for personal reasons; but plenty of accommodation.

"Teacher at Y.—School residence generally good. No water or drainage troubles. Eight rooms in his house, but not well arranged. Size of rooms, 12 ft. by 13 ft.

"Houses in the *arrondissement* of Montaigne the least satisfactory, because they are the oldest.

"House large, but only three rooms and an attic.

"Teacher's house, four rooms, including dining-room, and kitchen.

"House with only two rooms and a dressing-room. One room his thus to serve for living and sleeping in. All right now, but difficult when teacher had a family."

In spite of the non-palatial accommodation of some of the houses, I found little discontent on the part of their occupants. Still, against this I am constrained to place on record the picturesque complaint of one teacher, who, speaking of the magnificent efforts made after the war to render national education a reality, said, "Many fine schools have been built which have plunged some communes in debt for years, but *on a été trop occupé de faire la cage belle, on n'a pas assez pensé à l'oiseau*" (the teacher). Certainly if the accommodation is not everything to be desired, the upkeep is generally satisfactorily maintained. The only point on which the communes occasionally show obstinacy is in painting and whitewashing. It is difficult for persons who only whitewash their own premises once in ten years to understand the necessity every other year of such a proceeding for the school buildings.

The housing of the *adjoint* and *stagiaire* seems in a less satisfactory state, especially if they are married. The matter is made a subject of comment in the report of the Academy Inspector of Orne for 1899. The law prescribes that they should have three rooms at their disposal if married and two if single, but in many cases they are only provided with a single room, and that sometimes without a fireplace. The married assistants are thus obliged to live out at their own expense. The teachers themselves, if married, rather object to this living at close quarters in the same building.

Housing of
assistants.

Their goings out and comings in are the subject of much mutual criticism and observation. The unmarried assistants, on the other hand, often board with the teacher's family, paying in the case of women, 45 francs a month, or two-thirds of their salary if *stagiaires*!

Water, etc.

I heard but one complaint about the drains and water supply, and that from a scientifically minded teacher whose own supply was all right, but who regretted the gross ignorance and carelessness that were still shown by the majority of communes as regards water. This complaint is certainly not without foundation. I came across one or two communes in which diphtheria was endemic, yet nothing seemed to be done to counteract it. The local sanitary authority in the village is the mayor, and if he is indifferent there is no one to move in the matter. The schools are, however, on a different footing, and this question of pure water has already exercised the authorities at the Ministry. A Ministerial circular of 1897 ordered academy inspectors to look into the question, and have samples of water analysed if necessary.

School gardens.—Ninety-five per cent.* of the rural schools in France have gardens attached to them, not, as several writers on education in England have rashly asserted, with a view to instructing the pupils in agriculture, but for the benefit of the teachers. The precise rôle of the garden in school-teaching will be discussed in its proper place. Let it suffice to say for the present that the vast majority of teachers seem to be keen horticulturists, and many of their gardens, though small, are models of neatness. On this point I was assured by one inspector that if they were not, the inspectors would speedily direct their attention to the bad effect such negligence would produce.†

(viii.) EXTRANEOUS TASKS.

ut of
chool
uties.

The rural teacher in France has generally, as we have seen, in addition to his scholastic duties, to act as secretary to the *mairie* of his commune. But his out-of-school labours do not end here. If the legislation of the last twenty years has rendered him completely independent of the *curé*, he is probably at the present time a harder worked man than ever. The two causes of his working overtime are the extra preparation given out of school to pupils who are going in for the *certificat d'études*, and the large amount of time he often devotes nowadays to the *autres post-scolaires*. A detailed discussion on the *certificat d'études* is best postponed till the school curriculum has been examined, but the following quotations from my notes will give a fair idea of the extra toil and trouble involved by the present conditions under which the *certificat* is taken.

teaching
or the
ertificate.

"M.—Six pupils preparing for the *certificat*. Teacher takes them

* According to official statistics there are 52,828 gardens.

† "Votre jardin n'est pas en bon état ; s'il n'est pas dans vos goûts de le cultiver, faites-le travailler à moitié frais par quelques voisins" (Pamiers). One of five extracts from inspectors' reports given in the Report I.E.P., to show the principal points on which criticisms are addressed.

for nothing every day from 7-8, and from 4.30-5.30." "Chauffour.— Voluntary evening classes for candidates preparing for the *certificat*, held in turn by four teachers, to accustom children to being examined by a strange person." "A common practice with many teachers to take their children before school, in the morning at 7, and again in the afternoon up to 6! (Inspector.)"*

One may well admire the public spirit of these hard-working teachers in thus giving their services gratuitously. But in my humble opinion there is another side to the question, which is perhaps lost sight of. Would not these children, if they are not ready for the examination after following the ordinary work of the school, be all the better for another year at the school? Do not the teachers in thus forcing the children unconsciously "cram" them in many cases, and at the same time hinder them from stopping on as long as they might, by enabling and encouraging their brightest boys to leave at the earliest moment? For the passing of the *certificat* is the signal of departure for the vast majority. I know they are yielding to public pressure, in some degree; but it would be, it seems to me, wiser for them to resist the current rather than to give way to it.

The recreative and continuation evening classes take up no small part of the teacher's leisure in winter. Their effect and potentialities will be discussed when we come to the subject of the extension work of the school. A few data here, however, will give a notion of the time and trouble consecrated by the teachers to these comparatively new duties. In the recreative branch, the teacher delivers during the session from three to six lectures on popular subjects, with or without lantern illustrations. The preparation of these lectures often takes a considerable time. The continuation evening classes are generally held three times a week, and last for one or two hours, the duration of the whole course averaging from three to four months. How ardently the teachers have thrown themselves into the business may be shown by the following fact. In Seine Inférieure, where the evening classes have taken great hold, the authorities have been obliged to issue a warning to teachers to remind them that, after all, the more important part of their work is the teaching in the day school.

Other voluntary services rendered by the teachers are the creation of old boys' clubs, of school shooting clubs, of saving societies, or of mutual insurance associations among the scholars. They have also to keep an eye on the *caisse des écoles*, and the school libraries. In fact the teacher is expected to lend an active hand in the propagation and furtherance of any educational or social movement outside the precincts of the school. As an *instituteur* said very wittily to me, everything centres round the teacher. Agriculture is in a bad way. Professors of agriculture are created. That does not do much to improve the situation. The teacher is called in.

* It appears that these extra classes have recently been formally forbidden by the administration. (See page 4 Rapport-Préalable sur l'organisation pédagogique des écoles à plusieurs classes. Paper published by the "Amicales.")

Recreative
and
continuation
school work

The teacher
a handy man

The authorities desire to combat alcoholism. The teacher is called in. They desire to establish evening schools on a large scale. The teacher is called in. In fact, it would be no exaggeration to say that the teacher is the handy man of the French nation. It is really splendid to see how he has so far responded, without flinching, to the successive appeals that have been made to his patriotism and public spirit. *Ce sont toujours les mêmes qui se font tuer !*

Overwork
a serious
question.

None the less, the question of overwork is becoming a serious one, and the authorities are already occupying themselves about it. The remarkable conference of the academy inspector of Loir-et-Cher has already been alluded to. The English teacher who complains of extraneous tasks will derive but scanty consolation from a comparison between his tale of bricks and that his French *confrère* has to compile. The only point where the comparison is likely to be in favour of the French teacher is that, perhaps, in some cases, he finds the work more congenial, because it is to a certain extent a "free-will offering."

(ix.) REWARDS AND PUNISHMENTS.

Rewards.

There is a regular list of rewards for meritorious teachers, beginning with the *mention honorable*. The other grades are the bronze and silver medals. The latter allows the wearing of a regular decoration, and carries with it a pension of 100 francs. One silver medal is given for every group of 300 teachers, a bronze for every 120 teachers, and a *mention honorable* for every 80. So these honours are by no means too easy to obtain. As a further distinction a limited number of silver medallists can receive the *palmes d'officier d'Académie*, and five years later a select few can attain to the position of *officier de l'Instruction Publique*. Similar rewards and decorations are also given to the teachers who have distinguished themselves in their evening continuation or recreative work. There are further medals for obtaining vaccinations, and rewards for agricultural teaching.

Punishments.

The law of October 30th, 1886, established a regular scale of penalties:—(1) the reprimand, which is administered in private by the academy inspector; (2) the censure, which is inflicted in public; (3) revocation; (4) suspension of the liberty to teach; (5) absolute suspension. For all save the first the intervention of the Conseil Départemental is required, and in the case of the last three penalties an appeal to the central authorities is provided for. The heavier penalties are however rarely applied, and only for the gravest offences. I only heard of two cases in the course of my tour. Any teacher who is really unsatisfactory is given the option of sending in his resignation.

(x.) PROVIDENT AND PROFESSIONAL ASSOCIATIONS.

Provident.

Mention has already been made of the Teachers' Orphanage, whose membership is open to all State teachers in France. There are also numerous provident societies to be found everywhere; in fact, all the departments I visited possessed

at least one association of the kind. Thus, in Calvados I came across a *Société du Secours Immédiat*, which contains 288 ordinary members, paying one franc entrance, and made up of 152 male teachers and 106 female (which represents about a quarter of the State teachers), with twenty teachers' wives and ten teachers' husbands. On the death of any associate a small levy is made of, apparently, 50 centimes, on every member, and the proceeds are handed over to the representatives of the deceased. The society is only a year old, and has already made two levies (1900). The *Société du Secours Mutuel* in Orne is thirty-four years old. In 1898 it consisted of 729 members, of whom 516 were participants, or more than half the teachers in the department. It gives allowances to teachers on the sick list, and to female teachers on their accouchement, and pays pensions. The number of sick persons relieved in 1897 were 120, and the number of pensions 94. The reserve fund is over £2,000. In Sarthe, in 1898, the *Société du Secours Mutuel* had 322 members, of whom 308 were participants, or about one-third of the State teachers. In Indre-et-Loire the *Société du Secours Mutuel* had 366 participating members on December 3rd, 1897. The Academy Inspector in his report for the year expressed his astonishment at less than half the *personnel* belonging to the society. From it one learns incidentally that the annual subscription is 12 francs. In Loir-et-Cher the number of members of the provident society was 200, of whom 172 were teachers, or only a little over a quarter of the State teachers. The reserve fund was nearly £800.

The majority of teachers I encountered were also members of Accident societies a society against accidents and defamation. The English reader may well wonder why teaching should be such a dangerous trade in France as to necessitate a society against accidents. The accidents in question are not those which happen to the teachers, but to the pupils during the time they are under their charge. Until about two years ago the law rendered every head teacher in a primary or secondary school pecuniarily responsible for any injury a pupil might sustain during his presence in class or on the school premises, even if it were the result of the purest accident. Thus, if a boy in walking across the playground stumbled and broke his leg, or sprained his wrist in falling, the head of the school was pecuniarily responsible to the parents for the injury to their son. The effect of this law on outdoor sports in boarding schools is better imagined than described.* Happily it was modified by the Act of July 20th, 1899, and the State now accepts responsibility for accidents occurring during the legal hours of school, while reserving itself to fix the blame, if necessary, on an imprudent or negligent teacher. The most important of these societies—that of Toulouse—has more

* Les accidents, hors de France, affectent les familles, ils ne les arrêtent pas ; en France, ils les paralysent ; à leur tour les familles par leur effroi, par leurs plaintes, par leurs menaces, par leurs poursuites, paralysent, surtout dans les internats, les éducateurs.—M. G rard-Varet (*L'école et l'éducation morale*). "*Revue Pédagogique*," June, 1901.

than 25,000 adherents. In the case of accidents it assumes any responsibility the teacher may have incurred, and raises the necessary funds by occasional levies. In the last two years it has only demanded 2 francs 50 cents. per head from its adherents. Another "risk" society is the "Enseignement" of Paris. Teachers become members by the payment of 3 francs, and subscribe according to the scale of risks, the directors of boarding schools paying as high as 6 francs. In two years the society has attained a membership of nearly 700. Since its foundation no less than fifteen accidents have occurred affecting the society. Of these, two have been fought in the law courts and won.

pedagogical
and
professional.

founding
national
union of
French
teachers.

The primary teacher in France, being a public servant in the pay of the State, finds himself on a different footing to that of the English elementary school teacher. The right of association is very rigidly controlled under the French constitution. For these reasons anything savouring of an association of teachers on trade unionist lines has hitherto been quite impossible in France, though isolated societies have been tolerated, like the *Cercle des Instituteurs* in Sarthe, which exists mainly for the discussion of pedagogical questions, and is sixteen years old. Of these associations the Union of the teachers of the Seine is the most important. But until recently the authorities have rather discouraged even these modest attempts at federation. A decisive step was taken last year at Laon, where a congress for all the associations of teachers was permitted to be held. It was decided at that meeting that an "*Amicale*" should be founded in each department. The most interesting article of association was that which stated that "the '*Amicale*' has for its object to facilitate between teachers exchanges of views and free discussion, the study of questions which interest the profession without excluding from it those which refer to their personal situation." The articles further provided for schemes of co-operation among the teachers in the way of trading with such shops as agreed to give teachers preferential prices. Efforts were to be made to help the widow and orphan; a provident society was started; a system of assurance was to be founded; every "*Amicale*" was to have its bulletin to chronicle its doings. It was decided to hold an annual congress, and Paris was appointed for the rendezvous; and, lastly, a very interesting movement was started which may have far-reaching consequences, called the *Coopération universitaire pédagogique*, which aims at bringing into line all professors and teachers in the three grades of education.

The Paris congress was held during the Exhibition. One of the most interesting debates was on the *certificat d'études*. The teachers being, so to say, at home, were able to speak with far more freedom and precision than in a debate open to all comers, in which a certain official reserve would be naturally requisite. But perhaps the most pleasant, and at the same time the most significant, feature of the proceedings was the presence and participation in the debates of several of the leading officials, including no less a personage

than the Director of Primary Education himself. What was still more piquant was that the latter not only took part in the debates, but was actually worsted on at least one occasion. It is almost superfluous to add that he took his defeat with the utmost good humour, and for once, to paraphrase the well-known French expression, it was possible to see a man who was "*battu et content*." It seems difficult to estimate the effect of such departure in France, where the Administration possesses a prestige akin to that attached to a military or religious hierarchy. But the participation of the Chief Director was an act of rare courage, carried out with perfect tact, and no doubt will have all the reward it merits. The meeting was closed by a speech from the Minister, who indicated pretty plainly his appreciation of the teachers as the real backbone of the *Défense républicaine* and the best exponents of all the modern ideas bound up with that régime. The French State teachers are starting their association under the happiest auspices. Without neglecting their material interests, they have put into the forefront of their programme the cause of national education. Its prospects. Considering there are over 105,000 State teachers and probationers in France and Algeria, the enlistment of these in a single association will convert them into a veritable standing army capable of enormous and almost irresistible influence, provided they are willing to devote the major part of their efforts to patriotic endeavours to make the school the greatest moral influence in the country, not merely within the four walls of the classroom, but outside, through the other work it has already undertaken. If, however, they are beguiled into employing too freely their newly acquired forces to further their own class ends, they will speedily fall from their high estate, and in grasping after too much, lose the very power through which they hoped to attain their selfish ends, and instead of being looked up to by the majority of their countrymen will become an object of profound suspicion and mistrust. I ventured to say as much as this at the banquet after the congress, and if the kind way in which my somewhat venturesome remarks were received and the numerous thanks I received afterwards from individual teachers are any criterion, there is little doubt the teachers are fully aware of the high privileges the new association throws open to them and the danger that a misuse of them will entail. It may be very presumptuous to prophesy, but somehow one cannot help feeling that the recent congress has a real chance of being regarded hereafter as one of the principal points in a movement whose main object is to render France more truly democratic in the best and highest sense of the word.

(xi.) RELATIONS WITH INSPECTORS AND MEMBERS OF OTHER GRADES.

The relations between inspectors and teachers have already been touched on in the description of the special conferences which are summoned to discuss pedagogical questions. Another occasion

Relations
with
Inspectors.

for their meeting is the examining board of the *certificat d'études*. All inspectors are not perfect, and there are some—but they seem to be very few in number—who belong to what may be called the martinet type. A director of an *école normale*, in discussing the question, cited to me a terrible phrase of one of these “wrong-headed” inspectors who used to say, *Il ne faut pas avoir du cœur; il faut sabrer*. But this military spirit, so contrary to the best ideas of modern education, is certainly not gaining ground in France. On the contrary, time after time I came across evidence, both oral and material, of the mutual esteem which inspectors and teachers entertain for one another, and certainly a large number of the inspectors whose provinces I visited not only think highly of the teachers, but lose no opportunity of consulting them on any knotty question. Thus one of the ablest teachers I met vouchsafed the remark that the inspectors were regarded as the best friends of the teachers, and the only misfortune was that they were not always listened to in higher quarters. In another department I was assured by a teacher that the inspectors never do anything without taking the teacher's advice. In fact the two grades seem to be on excellent terms.

Relations
with other
grades.

Comparative
isolation
and its
effect.

Primary and secondary education in France are organised on different lines from the outset, although, it is true, a very limited number of primary teachers are attached to some of the *lycées* and *collèges*. This, together with the fact that the primary inspectorate is almost exclusively recruited from the ranks of primary teachers and of professors at primary training colleges, tends to separate the teachers in the two grades into two distinct classes. It is not until we come to the academy inspector, who is usually taken from the ranks of the secondary professors, that we find any connecting link with secondary education. The consequences of this system of education in water-tight compartments have been numerous and far-reaching, and, what is somewhat surprising at first sight, the advantages as regards primary education appear to have outbalanced the disadvantages. At any rate in the extensive differentiation that has taken place between the aims, methods, and traditions in the two branches of education, primary instruction has not altogether been the loser. Its comparative isolation has led to a growth among primary teachers of a fine spirit of *esprit de corps* and a wide interpretation of the teacher's sphere of duties which the secondary schoolmaster might well copy. It might be expected that the absence of the influence of the exquisite culture which distinguishes the French secondary schools, and renders them in that regard quite without a rival in the world, would make itself painfully felt in the primary and normal schools. This, however, has not been the case. The general atmosphere of culture which pervades French society—especially French literature—has been sufficient to ensure that the primary teachers have run little risk of imperfect equipment in this respect. On the other hand, the absence of any close connection with the traditions of the higher schools has facilitated the free examination

of time-honoured methods and the rejection of those which have been found antiquated. It has also allowed of subjects being examined on their merits, and their actual value assessed in the light of their relation to the other subjects in the curriculum and the aim of the school as a whole, instead of being regarded as indispensable *per se*, and forming, as it were, an irreducible part of the school work, owing to the prestige they have received from the consecration of immemorial time. This especially applies to the programme of the higher primary schools, which has been distinctly framed to meet modern requirements.*

In England, on the other hand, the procedure seems to have been different. Although from time to time primary teachers have been promoted to the inspectorate, the latter has been mainly recruited by men taken from the universities and imbued with all the traditions of secondary education. As regards pedagogical knowledge, they have mostly had to pick up their information as they go along, and piece it together into some sort of system, whereas the actual appointment of the French primary inspector depends on his success in passing a stiff examination in scientific pedagogics, largely fortified by several years' experience in teaching in one of the schools connected with primary education. On the other hand, the English inspectors' intimate acquaintance with the traditions of public spirit which prevail in our higher secondary schools has rendered them valuable intermediaries in handing down to the primary schools those notions of *esprit de corps* and the duty of serving the State which are perhaps the most precious feature of our national education.

The Teachers' Guild in England is an attempt to recognise the cardinal fact that all teachers are members of one body, although their functions are often necessarily different. This need is also being felt in France, and has led to the formation of a league, already alluded to, called the *Coopération Universitaire Pédagogique*.

A French
Teachers'
Guild.

* In the more delicate questions of manners and social education it is probable the French teacher has suffered less from the evil effects of class distinctions than his English colleague. It is further an undoubted fact, as Mr. Bodley shows, that what may be called social education has penetrated far further down into the French nation than with us. "The great need of the (English) training colleges makes itself felt less on the intellectual than on the social side. The greatest hope for their improvement lies in a more general class leavening. Of course, even under present conditions, pupil-teachers are drawn from many grades, but there are not always candidates enough affected by the social traditions which create in colleges and schools, as elsewhere, a strong public opinion in favour of small but important amenities of bearing, and even of speech, which are at once the sign and safeguards of good breeding. . . . The chief agency for good must be looked for in the healthy interaction of students of all classes." Passages from training college reports by Her Majesty's Inspectors for the year 1896 (C.-8493; 1897, p. 13), quoted in an article on the teacher problem in the "Fortnightly" for May, 1899, by Mr. Harold Hodge, editor of the "Saturday Review," which contains a singularly fearless, if somewhat drastic, criticism of this particular aspect of primary education.

gogique, for all grades of professors and teachers. The formal ties already exist. Primary teachers are classed as *universitaires*; for although, as a rule, they have not taken a university degree, they are under the rector of the local academy (or university), and are regarded as part and parcel of the State education of the country, at the head of which is the rector, a post which is always held by the Minister of Public Instruction. The object of the league is thus defined:—

To affirm this community of tendencies (towards co-operation), to realise a closer collaboration everywhere, where the necessity is recognised, to create ties of good fellowship between men, who, while engaged in a common task, and animated by the spirit and the same passion for science, truth, and the public weal, neither *associate nor are acquainted with one another*. (The italics are mine.)

The whole programme is highly interesting. The following represent the gist of some of its articles:—(1) The help that primary teachers can give towards sending to the secondary schools any pupils who appear likely to profit by a secondary education. (2) Concordance to be established between the curricula of the primary, higher primary, technical, and secondary schools. (3) Discussion on whether the distinction between primary and secondary is specific or one of degree, necessitated by the difference in age and aptitudes of the pupils. (4) To decide the value of the distinction between higher primary, secondary—modern and secondary—classical. (5) Should the methods in these schools differ, allowance being made for pupils' ages? (6) Recruiting of teachers for the primary schools, and for the lower elementary forms in the *lycées* and colleges. (7) Need of experimental science in secondary schools? (8) Is the purely literary part overdone in the secondary schools? (9) Is the entrance examination for the normal schools stiff enough? (10) Does the teaching given in the normal schools sufficiently take into account the growing need of the *post-scolaire* work of the schoolmaster? (11) Could not normal pupils be admitted to certain university classes? (12) The connection between technical, primary, and secondary schools. (13) Is there enough general education in the technical schools? (14) Utility of training for secondary teachers; should such be given in primary as well as secondary schools? (15) Need for such persons of a study of pedagogics. (16) Free education for teachers' children in secondary schools. (17) Extension of university action (*universités populaires*). (18) Need of assuring and generalising the *post-scolaire* education of young people, seeing that the results of primary education are insufficient from the civic point of view. Need of child study to assist the simplification of the primary curriculum. (19) The holding of university congresses open to all grades.

The Outlook. The mere founding of such a league must appear as a great step forward to anyone who is acquainted with the considerable social differences that exist between the two grades. The average secondary teacher in France has a far higher status than the ordinary

assistant in a medium-sized-grammar school. He ranks at least with a barrister, while the latter would probably divide honours with the curate. The French primary teacher, being a State official, has thereby the advantage of his English colleague. But this very fact of being on the Government staff only marks more clearly his social inferiority to the secondary teacher as a subordinate member of the educational hierarchy. It will be interesting to watch which grade of education will gain most from the others, for they are all in the happy position of having everything to gain and nothing to lose by this federation.*

(xii.) THE NEW GENERATION.

A somewhat delicate question which I ventured to put on several occasions was whether there was any difference between the older teachers and those who were just entering the profession. I had found so much *esprit de corps* among the first-named, who, bred under the influence of the reforms of Jules Ferry, possess a kind of "education militant" spirit about them which has had, no doubt, a great effect on the country, and differentiates them from the *vieille garde*, who date from before the period of reform, and though no shirkers, have—because the more recent changes are but of yesterday—through the approach of age rather than any natural unwillingness, thrown themselves less fervently into the new developments. It seemed to me that if this steady stream of democratic effort, under some of its best aspects, could only maintain the strong impetus that has hitherto characterised it, it must, if it does not actually invade other provinces of education, set up in those which are, in comparison, somewhat stagnant, a health-giving current, and renew, like some naissant Gulf Stream, the whole arterial system of national education; and raising oneself for a moment to a still higher plane, and regarding all this outward and visible organisation, so strongly knit and bound together, as a manifestation of the Time-spirit in its effort to give fuller and more complete realisation to new ideas and aspirations, one could not help beholding such a mighty engine for good or ill without profound emotion, and wondering if it would deviate from its original course or, worse still, lose some of its pristine momentum. And so, through no desire to pry into a neighbour's possible weaknesses, but rather in a spirit of hopeful sympathy, I asked not a few persons whether the new race of conscripts that the normal schools are now turning out were equal to those who are at the head of schools to-day. As a rule I received satisfactory answers. One or two stated that

* The movement seems to be growing. In the *Rappel* of 7th October, 1900, M. Valette, writing on the "Union des trois ordres; professeurs et instituteurs," says: "Les professeurs des universités et nombre de professeurs des lycées et collèges sont descendus dans la lice: ils ont vu de près l'école primaire et ses maîtres; la glace est brisée! Le premier pas est fait! Laissons tous de côté ou nos prétentions ou nos idées personnelles; appuyons-nous les uns sur les autres!"

the younger generation seemed less devoted, and showed signs of shirking any extraneous work. A high official spoke of the great influence for good or evil of the educational press, which occasionally flatters the teachers too much, and preaches at times a sort of trades union doctrine of earning as much and doing as little as possible. The older members were not affected, but some of the younger members of the *associations du secours mutuel*. In his own province he took the bull by the horns, and at a teachers' meeting directly posed the question of confidence. "Did the Administration, or did it not, do all it could for the teacher? Of course it could not do everything." The assembly, with the exception of the president of the association, voted "aye," and they would have done the same, said the speaker, if the vote had been by ballot. On the other hand, I received many assurances that the younger generation were quite as ready to put their hand to the plough as the older members of the staff. No two generations are ever alike; but if, as it seems, the younger generation turn out as energetic as its predecessors, there is little fear for the future of primary education in France.

CHAPTER III.—THE STATE SCHOOLS AND THE PUPILS.

THE STATE SCHOOLS.

A.—THE MATERNAL SCHOOLS AND INFANT CLASSES.

Maternal
Schools.

The maternal schools not being obligatory for communes under 2,000 or for *agglomérations* of the population under 1,200, I only came across a limited number, although, thanks to the work carried on by the religious orders, they are by no means uncommon in country districts.*

After several attempts at finding the right methods—attempts which will always be associated with the name of Madame Pape-Carpentier—the existing system, which prescribed the study of colours and exercise in geometrical constructions, as well as the elements of reading, writing, and oral calculation, was happily modified by M. Gréard, who introduced into the schools the methods of Fröbel, with his system of *Spielgaben* (*Rapport E.P.*).† "Les jeux des enfants ne sont pas jeux, et les faut juger en eux comme leurs plus sérieuses actions," said Montaigne. Judging the children in these schools by their games, the education seems serious enough. The only danger seems lest it should be too serious. As Miss Tolman Smith, American juror for primary education at the Paris Exhibition, writing in the *Educational Review*, September, 1901, says: "The infant school is friendly in spirit, but in too great haste to suit the child for practical life." Another besetting sin is an

* For further details on the subject see article on the *Écoles Maternelles* in Paris, by Miss Beard. Special Reports, Vol. 8.

† According to the monograph cited above the use of the "gifts" is by no means universal.

inordinate desire on the part of some of the mistresses to render their teaching too ambitious. It was in connection with this defect that an inspector related to me a characteristic story, told, I believe, by Madame Kergomard, who was informed, to her great surprise, one day by a kindergarten teacher that they taught history in her school. The lady demanded a sample of her art, and the teacher narrated to her class the history of Jeanne d'Arc. When the story came to an end, the majority of the children seemed discontented, and at last one of them said, "And the sheep, what happened to them?" The children, being of the country, knew what a sheep was, but had utterly failed to take in the rest of the "history" lesson.*

The schools are open from 7 to 7 in summer, and from 8 to 6 Regulations. in winter. A charwoman is obligatory. Children are divided by age and not by sex. If the mistress has over fifty infants she has a right to an assistant. Since 1889 teachers in these schools are placed on the same footing as those in the elementary schools. There seems to be no special compulsory training for those who intend taking up the work, as far as I could make out. At Caen, however, there is an *école maternelle* as well as an ordinary girls' school attached to the school. The directress of the school kindly showed me over the building, including the bath-room, where each child is treated to the luxury (as some people seemed to think) of a separate towel. A local committee of lady patrons had also furnished them with hold-alls and pocket-handkerchiefs. The *école maternelle* at Beaumont (Sarthe) consisted of a large covered court, an excellent harbour of refuge on a rainy day. The refectory was furnished with two beds, and there were two class-rooms. The school is managed by two religious sisters, and any children are taken who are over twenty-five months old. A pleasing feature in the school is its museum, which is almost entirely composed of offerings by the children, and contains specimens of weights and measures, minerals, cocoons, stuffed birds, etc. Although we arrived at the end of the afternoon school, the children looked supremely happy. This, however, may be partially accounted for by the fact that it was the hour of "*fourses*" or the afternoon *gouter*. The school is in a somewhat anomalous state, as the building had been left to the town on condition that it was staffed with nuns. The acceptance of this legacy involves, apparently, a very nice legal point.

There are two kinds of *classes enfantines*—one which is Classe common in the big towns and serves as a stepping stone *enfantine*. between the *école maternelle* and the regular school; and the other which is found in the country, and receives children at four and even three years of age and prepares them for the elementary school. The teachers in both cases are on the same footing as the

* The administration are alive to this defect. In the Introduction to the Rapport E. P., M. Bayet says of the teachers:—"We must defend them against the temptation of teaching the children too much or too soon, and this last observation especially applies to the maternal school."

ordinary female teacher. The programme is a judicious mixture of kindergarten practices and the methods of elementary education. A few statistics for 1897 on the maternal schools and infant classes will probably not be without interest. Number of maternal schools, 5,683; of mistresses, 9,414; pupils, 729,648. Of these teachers 5,292 (including 1,010 *religieuses*) were in the State schools, and 4,022 in the private schools, in which there were only 271 lay teachers. It is therefore easy to see that the religious teachers outnumber the lay [4,827 against 4,382]. This also holds good for the departments I visited. If to this number of infants be added the number of the children in the *classes enfantines* and those in the schools under six (the legal age), we find that the total number of children under six in all the schools was 1,348,443 in 1897.

B. THE PRIMARY SCHOOLS.

(i.) *The Supply.*

Universal State schools. It has already been explained that every commune is obliged to maintain a State school, unless united for scholastic purposes to another commune, and that, further, communes over 500 souls are compelled to have a separate school for girls. A careful inquiry into the application of the law shows that the first provision has been very thoroughly carried out; in fact, some persons think too thoroughly. I myself heard of one small commune of only 80 inhabitants which had built and furnished a school which is attended by only four pupils. I was told of another, with a school population of five, which spent 20,000 francs on putting up a school. This extravagance is not always to be laid at the door of the Government, but is often due to the obstinacy of the communes, who would rather have to bear the cost of building a school than send their children to the school of a neighbouring parish. In another case I heard of, a commune with a school population of ten decided to have a school of its own, though the authorities did everything in their power to prevent this piece of reckless expenditure. The united district, in which several parishes combine—so much in favour in rural parts of England—is comparatively rare in France. The number of communes affiliated to another only amount to a little over 2 per cent. I only came across one or two instances in the sixty schools I visited.

This adequacy in the school supply is borne out by the official statistics. Out of the 36,174 communes, only 47 have no school at all, and 86 have no public school; and some of these send their children to the neighbouring schools without being legally united. (One had only 14 inhabitants.) But very few of these schoolless communes seemed to be in the departments visited. Orne had only two communes in 1898 who were unprovided with schools. In Calvados, apparently, there were none at all. The six communes without schools in Loir-et-Cher are attached to other communes for school purposes. In Indre-et-Loire there were apparently none, while in the only one of the four circonscriptions of Sarthe for which I could get figures all the communes were provided with schools. Of the

communes with a population of over 500 and with no school for girls, there were 15 in Indre-et-Loire, 15 in Loir-et-Cher, several in Orne, 3 in the Le Mans circonscription of Sarthe, and only 4 in Calvados, which contains 763 communes!* Several of these are only just over the legal limit, and with the apparent rate of decrease in the population, will soon be within it. I did not come across any hamlet schools, but in one or two communes which were very big I found that the children on the outskirts went to the school of the adjacent commune. Thus the children of the quaintly-named hamlet, "Le petit bon Dieu," just outside Lisieux, go to the town schools, and not to that of their commune, which is five or six kilomètres away.

French regulations are sometimes supposed to err on the side of inflexibility. In Sarthe, however, I came across an irregularity which admirably suited the needs of the case, and had been sanctioned by the Administration. The inhabited portions of a commune in the Forest of Perseigne are completely separated from each other by an intervening band of forest, $2\frac{1}{2}$ miles wide. Instead of building two separate schools, one for the boys and the other for the girls, which would have been out of the way for half the population, the authorities hit on the happy expedient of erecting two mixed schools, one at each end of the parish. The two schools are run by a married couple, and the only sufferer is the teacher, who has to walk every day to the second school, $2\frac{1}{2}$ miles away.

A happy modification

(ii.) Buildings and Furniture.

It has been previously stated that the construction of the schools and their upkeep are at the charge of the commune, the State only intervening to make, in the case of the poorer communes, grants to the building fund for a new school, or to aid the appropriation of a building hitherto rented by the commune. Reference has also been made in speaking of the teachers' houses to the three stages of building activity in the history of French education, the schools of the third or most recent epoch being naturally the most satisfactory. It has also been stated that in the case of a large number of rural schools, the *école type* is a block of buildings formed of the teacher's house, the school, and the *mairie*. Not infrequently the latter is only a single room, to which, at times, the sole access is through the teacher's house. The girls' school is sometimes to be found attached to the opposite end of the block to the boys' school; sometimes it forms a distinct building along with the female teacher's dwelling.

Buildings.

Of the numerous variety of school buildings, those which were originally private houses adapted to school purposes are naturally the least commodious, but even these, in general, are well lighted. The majority of the modern constructions are lighted on one side, usually the left, and some have windows on three sides. I came across none of the large, barn-like edifices, which were the favourite

State of buildings.

* The figures for all France and Algeria were 646 communes over 500 inhabitants with no girls' school at all; 708 had only a private school for girls, out of a total of 18,539 communes affected by the law.

type in England in the early days. As a rule, the class-rooms are designed to hold a maximum of 50 pupils, with a surface allowance of 4 ft. 2 in. square per pupil, and with a minimum height of ceiling of 13 ft. 4 in. They seem to be sufficiently warmed by stoves in winter. The floors are generally of wood. The ventilation* is good, and I was particularly struck by the absence of what may be called the *odor scholasticus*, due to the free way in which windows were kept open. In only one or two class-rooms, where the teachers belonged to the old school, was any stuffiness apparent. The cleaning of the schools, as far as dusting and brushing is concerned, is performed by the scholars themselves, a certain number being deputed *à tour de rôle* by the teacher to sweep out the class-room after school hours.

Apart from any structural defects due to their antiquity, the "outside" state of the schools seemed satisfactory enough. All the teachers I questioned declared that their class-rooms were wind and water tight. The official statistics show that the great majority of the schools are either in a sound state of repair or, at least, that everywhere progress is being made to render them so. Thus in Calvados, in 1897, out of 924 public schools, only 19 schools owned by the communes, and 10 rented by them,† with 2 lent by private individuals, were classed as unsatisfactory. As the rented premises are rapidly being appropriated—there were only 22 in 1897, against 153 in the preceding year—we may probably neglect this category, as it is quite possible that these remaining buildings have already been acquired, while the houses "lent" are naturally to be put in a different category. This reduces the number of schools in bad repair in 1897 to something like two per cent. for the whole department. The Academy Inspector for Orne remarks in his report that the state of the schools improves every year, and gives a long list of repairs effected in various schools. In Sarthe, the academy inspector (1899) speaks of the improvement of school buildings being continued in 1898. The same note of satisfaction characterises the report of the Academy Inspector of Indre-et-Loire for the same year. The only difficulty with the communes was their reluctance to whitewash, which has already been mentioned in the remarks on teachers' houses. One inspector told me he had about 50 schools out of 230 in which the regulation had not been observed. The Academy Inspector for Orne also makes the matter a subject for official criticism in his report. The same authority complains of the bad installation of the privies. In the great majority of schools I saw, the arrangements, though at times primitive, seemed generally inoffensive. A desideratum in some schools is a *préau couvert*, or covered playground. Here is just an instance where the personal

* Matthew Arnold in 1859 was struck by the excellent ventilation.

† In 1897 the number of school buildings belonging to communes were 52,879 (those containing two or more schools under one roof count as one); number of buildings lent or hired 8,649.—(Official Statistics.)

influence of the teacher may induce the commune to sanction the necessary expense. I came across two teachers who had persuaded their communes to put up a *préau couvert*. One had cost no less than 375 francs, which seemed a good deal for a small place where the total income was only 6,972 francs, and the annual amount spent on the school was only 75 francs.

The state of the school furniture seemed less uniformly satisfactory. It was often decidedly antiquated, and the sitting accommodation in two schools was insufficient, and ill adapted to the smaller children. This opinion is confirmed by the various reports of the academy inspectors on the subject, although it is clear that in some departments much has been done of late years. Thus in Calvados, in 1897, no less than 99 out of 924 schools had the furniture replaced or done up. In Sarthe, the academy inspector, writes:—

The transformation of the old fashioned school furniture into regulation furniture takes place slowly. Almost everywhere people cannot make up their minds to replace desks and seats till they are absolutely worn out. In many schools blackboards are not repainted often enough, and are therefore often useless. . . . There are not enough maps, natural history charts are rare. School museums do not exist in all schools, and when they do, they are generally badly arranged.

Still, even here there is progress to be reported, for 20 schools were refurnished during the year. The inspector of Indre-et-Loire observes —(I have abridged his words)—that

The state of the school furniture improves daily. There are still too many old-fashioned desks about. Certain communes have still to furnish their schools with a *musée scolaire*, a metrical compendium, a counting machine, a terrestrial globe, and charts for teaching reading and natural history.

The inspector also recommends that mural decoration should be made an important feature. The example is cited of several teachers who have adorned their walls with pictures of animals, of harmful and useful insects, of birds, and of venomous plants. He likewise advises that they should also procure the coloured advertisements of the railways. Furthermore he suggests the acquisition, where possible, of maps of the department, the arrondissement, the canton, and the commune. The two latter, he remarks, the teacher might draw himself. Among the compulsory objects to be exhibited in every class-room is "the declaration of the rights of man," and an extract from the *loi Grammont* "on cruelty to animals." This movement in favour of mural decoration has lately received considerable impetus by the distribution by the Ministry of a large number of views of French scenery procured from the railway companies, with, of course, the railway part suppressed. These sheets are printed in bold bright colours, and add a certain amount of picturesqueness to the bare whitewashed walls; for pictures to the country lad are as fascinating as flowers to the town child. We might almost look on them as the flowers of the towns, fit sub-

jects of barter for our rustic primroses and daffodils. In the school at Douvres (Calvados) there were hung up large placards inscribed with such inscriptions as "le drapeau passe, chapeau bas," or "l'alcool, voilà l'ennemi!" Some of the teachers exhibit series of illustrations which depict the evils of alcoholism. The capital defect of these pictures is that they treat the question from a sensational, rather than a medical point of view. Hence I am told that many teachers, after acquiring these pictures, are so disgusted with them that they relegate them to the school cupboard. An excellent idea of a class-room, thoroughly furnished and equipped, was given at the Exhibition, where there was a model class-room of a mixed school, with benches adapted to the size of the children.

The following is a shortened *résumé* of its contents, taken from the *Revue Pédagogique* for July, 1900.

The library contains books for reading in class or at home. On the desks are lying the proper registers, the master's preparation note-book, a collection of exercise books, and the regulations at their side.

The blackboards contain summaries of the day's lessons. Here a moral maxim taken from Jules Ferry; at the side, the plan of a lesson on duties towards oneself, illustrated by a pretty sketch of the castle of Chillon. On the back of the same blackboard a school song; there a summary of a lesson on the Bastille, also illustrated. On a third blackboard the plan of a lesson which bears simultaneously on arithmetic, the metric system, drawing, and manual work.

The mural decoration is sober. There are the fine illustrations of Hugo d'Alési, that the Ministry present to the schools; the bust of the Republic, the portrait of the President, placed above the Declaration of the Rights of Man, and that of Pasteur.

The cupboard, placed under the clock, merits particular mention. It contains the materials necessary for object lessons, and even for lessons in civic instruction. Except for a few small pieces of apparatus and the small glass objects which must necessarily be bought, the rest of the materials for experiments have been put together by the master; notably an apparatus for distilling, a magnifying glass, made of a globe filled with water; an electroscope, made of paper; a compass, formed of a magnetised file, balanced on two forks; a pyrometer, etc.

The collection made by a teacher for his lessons in civics is interesting. It contains documents for all kinds of lessons on the subject: A soldier's pocket-book; a voting paper; a tax notice; a railway ticket; labels and forms for the parcel post; different notices posted up at the mairie; old deeds, assignats, etc. Attention should also be given to the metric compendium and the materials for teaching geography, and lastly, agricultural experiments are represented by a coloured photograph of three successive stages in the cultivation of a wall-flower. The practical experiments in cultivation of plants are represented by specimens placed in two flower boxes, which in the real school would be placed in the window."

With reference to the objects mentioned above, the teaching of the various subjects they illustrate will be discussed in its proper place. A word may be said here on the *musée scolaire*. It is found nearly everywhere. In Loir-et-Cher, there is one attached to every school. In Orne the absence of one is an exception. Its function was admirably defined at a conference of teachers in Marne, in

the model
class-room
at the
Exhibition.

musée
scolaire.

1898, "as the indispensable auxiliary of the real object lesson." It must not, however, resemble a curiosity shop. "For collections formed at hazard, and with no definite plan, are of no utility. The museum must be appropriate to the teaching, not the teaching to the museum." The major part of the collection should come from the pupils themselves. The purchase of school museums *en bloc* should be discouraged, nor should the museum be a simple object of parade. Its chief purpose is that it should be of practical use, being not so much a receptacle for the safe storing of curiosities as for the display and explanation of the concrete side of the school teaching. Some of the school museums I saw were thickly coated with the dust of disuse. Others, again, were arranged on the *omnium gatherum* principle, everything being looked on as fish that came into the teacher's net. One teacher, for instance, showed me a museum of his own with over 4,000 objects. This private collection may stimulate the curiosity of the few, especially as it is the master's hobby, but its general educational value cannot be very great, and confirms the statement of one inspector who said the *musée scolaire* renders little service, as it is not practical enough. But a fairly large number of museums seemed to be in actual use, and subserve a very definite purpose, especially in notions applied to agriculture. A certain number of schools also possessed a few simple pieces of scientific apparatus, similar to those in the *classe modèle*, which the teachers had managed to get together or manufacture themselves. In many schools there still hangs a crucifix, relic of the days when the schools were under religious authority. In a few they have been taken down, and in one school the teacher apologised to me for its retention.

THE PUPILS.

(I.) GENERAL APPEARANCE.—DISCIPLINE.

I was very favourably impressed with the general appearance of the children. They were for the most part neat and tidy in their dress, and their hands especially were clean. The copy-books, which are usually a fair test in this matter, were singularly free from tell-tale finger marks. It was not till I had visited some twenty State schools that I came across signs of dirt and untidiness. The work of the children was also neat and well arranged. There is apparently more written work in the French schools than with us, and the majority of it is not merely an exercise in writing, but also in general accuracy and neatness. This seems due in no small measure to the *cahier de roulement* into which every pupil in the class copies in turn his work for the day.

As regards the behaviour of the pupils, the discipline seemed generally good. I came across one or two probationers who appeared to have mistaken their vocation or else not yet received

it, but the average teacher certainly managed to get and maintain the "ear of the house," though some were less argus-eyed than others in detecting the bye-play that is liable to go on at the bottom of the form. The exits and entrances were also effected in good order, the children, especially the little ones, often forming up and marching out singing.

Rewards.

As regards rewards, I came across one school in which the teacher does not believe in prizes. He admitted the work was harder, but the absence of tangible means of encouragement obliged the master to study the character of the pupils—a very true remark; but *non omnia possumus omnes*, and the majority of schools have regular prize givings. The money for the books, amounting sometimes to 100 francs, is given by the commune or by private individuals such as the *délégués cantonaux*. To encourage the children between whiles, the first two who are at the head of the class for a week or a month are allowed to wear a badge of honour. In some schools there is a regular *table d'honneur*, on which the names of those who have passed any public examination, such as the *certificat d'étude*, are inscribed.

Punishment.

As regards punishments, corporal chastisement is now abolished in French schools, and the only penalty seems to be keeping in for half an hour or the setting of lines. One teacher, I was told, solved the difficulty by offering pupils the alternative of working in his garden. The parent who told me the facts evidently considered this method of punishment as the more excellent way. The system, however, possesses the disadvantage of being liable to abuse; at all events, it is conceivable that a fine crop of impositions might appear just at the moment of the potato ingathering.

The ethics of corporal punishment.

As a believer in the virtues of the cane on rare occasions, I asked a good many teachers their views on the subject. One inspector I spoke to seemed quite shocked at the idea, and must have regarded me, I think, as an inhuman monster. He nevertheless admitted that parents often strike their children. One teacher told me of a case where a parent threatened to prosecute an assistant for accidentally pushing his boy over. The teacher noticing an open wound on the boy's head, inquired how he had got it, and found it was the result of a blow inflicted by his father, so he set the law in motion against the "humanitarian" instead. Still, it is quite right that the school should give an example to parents, if necessary.

One teacher I met was especially bitter against the present "killing by kindness" system of discipline. She declared the pupils were not so obedient or diligent as before. She had commenced teaching under the religious *régime*, and when the sanctions of the catechism to which she had hitherto appealed in correcting the children's faults were denied her, she naturally experienced some difficulty in hitting upon others. She further complained that parents sided with the children against the teachers, and related how she occasionally broke the law with excellent results.

This was all very instructive. The mistress was thoroughly sincere, and represented an opinion that prevails among some of the older teachers. It is obviously very difficult to find at a moment's notice a new basis for one's authority. To those brought up in the *sic volo, sic jubeo* school, with its implied or expressed assumption that children should order themselves lowly and reverently towards their betters, the transition must prove a difficult one to those more practical methods which command us to try and explain to the child the why and wherefore of everything, even of our authority. But with the younger teachers I was again and again assured they felt no urgent need of corporal punishment, "having learnt to walk without a stick." Yet most admitted there were moments when it would be advantageous to make the appeal to brute force—which is, after all, only a scientific adaptation of Herbert Spencer's principle of natural circumstances for bringing the child into contact with reality, introducing him to the logic of natural forces in as real a way as we explain to him the action of any chemical substances by making them the subject of a particular experiment. One teacher told me of a case in which one of the children when it is naughty, in order that the majesty of the law may not be publicly offended, is taken into the back kitchen and "shaken up." Another teacher was against violent punishments, such as kneeling in the corner, but not adverse to a gentle box on the ears. The situation was very fairly summed up by one who said, "There is not a good master alive who has not given a 'sound smack' to some child in his life."

There does not seem to be much real over-pressure among the pupils, although they are coached in out-of-school hours by certain masters for the *certificat d'études*. The work is, of course, voluntary on both sides, but I should imagine the strain falls rather on the masters than the boys. The danger of all this extra work is not so much over-pressure as "cram." In some schools the home work tends to become heavy, but over-pressure in any case does not exist in primary education to the same extent as it does in secondary. Overwork.

(II.) THE ATTENDANCE PROBLEM.

(a) *Methods of taking the Education Census.—Results.*

France is one of the few countries in the world which appreciates the necessity of collecting official statistics in a thorough-going fashion. And yet how many apparent difficulties and problems are reduced to their just proportion by the application to them of Sir Robert Giffen's favourite dictum of "put a figure on it"! The stout folio volume on primary school statistics issued by the Ministry of Public Instruction in 1897, and brought up to date in some cases to 1900, is altogether an admirable condensation

How the
educational
census is
taken.

of numerical facts concerning the schools. As regards the figures for attendance, their sources are naturally the register kept by the teachers. These are of two kinds—a *régistre matricule* (obligatory only in State schools), on which are inscribed the names of the pupils as they enter, and a "call over" register, for noting down the "presence and absences." The *régistre matricule* also contains a column for the date and place of the pupil's birth, for the name and profession of the parents, for the date of entry and leaving of the pupils, with comments on their progress and the profession they embrace. The classes are called over twice a day. The ordinary register contains at the end a *résumé* for the year. In the first column comes the number inscribed during the month followed by the total attendances possible, the total absences, and the total attendances. To arrive at the total number of children at school in any country, one may either take the total of the children whose names are inscribed during the year, or the number of the children during any particular month, or the number inscribed on the roll on any set day, or, lastly, the number present on a set day. The first method is probably the best, if certain precautions are exercised, such as entering in a second column the children already inscribed in another school during the year. This double registration affects about 4 per cent. of the children in France. Before it was taken into account no less than fifty-four departments were returned with more children in the schools than existed within their area according to the census! The latter, however, is sometimes at fault. Those who fill in the papers occasionally blunder as to whether a child is thirteen years old or in its thirteenth year. The official figures, which are very carefully worked out, estimate "that the number of children who are entirely deprived of primary instruction is very restricted indeed." They none the less admit a decrease of 2·7 per cent. between 1891-2 and 1896-7 in the total number of enrolments. They further give a table of percentages of pupils present on two fixed days in comparison with the numbers on the books for the month and the total enrolment for the year. Taking, therefore, the total enrolments in France for 1896-7 as the norm, we find in the public schools 87·6 pupils inscribed for December, with 78·7 present on the 5th of that month, and in the private schools a percentage of 91·1 per cent. for the month, and 85·1 for the 5th day of the month; while the figures for June in the public schools were 84·6 per cent. and 73·2 per cent., and in the private schools 91·1 per cent. and 84·1 per cent. A point to note is the higher percentage in the private schools. There seems, however, a little doubt whether the registers are always so strictly kept in these establishments as in those belonging to the State. In seven departments the June average in the State schools falls below 60 per cent. The lowest average of all is found in Lozère—48·9. In three departments the average is over 84 per cent.

Results
of the
census.

The figures for the departments under review in 1896-7 were as follows (those for France are repeated for the sake of the comparison):—

	December, 1896.				June, 1897.			
	Public Schools		Private Sch'ls		Public Schools		Private Sch'ls	
	month.	day.	month.	day.	month.	day.	month.	day.
France - -	87·6	78·7	91·1	85·1	84·6	73·2	91·1	84·1
Calvados - -	*87·5	76·9	*90·3	85·4	90·9	82·5	95·1	90·5
Orne - - -	87·7	79·6	*90·8	86·7	90·6	82·7	96·9	92·7
Sarthe - - -	88·0	80·4	*90·6	*84·5	*80·5	*70·7	91·4	85·0
Indre-et-Loire -	89·5	82·0	93·0	87·6	90·0	79·6	94·7	90·4
Loir-et-Cher -	89·7	82·4	91·4	85·8	89·8	77·6	93·9	87·7

* Below average.

It will be seen that the public schools in these departments are distinctly above the general average of the country, and the private schools also stand higher than the national mean for similar schools.

(b) *History and present position—remedies—punctuality.*

Compulsory education in France dates from 1882. The law ^{Historical} of March 28th of that year declared primary education com- ^{sketch.} pulsory for children of both sexes between six and thirteen years of age. Education could be given in a State or private school, or in the family itself. A *commission scolaire* was to be set up in every commune, with the mayor at its head. The duties of the latter were to draw up every year a list of the children of school age, and notify to the persons in charge of these children the date of the opening of the school. Various disciplinary powers were given to the commission, while to encourage the school attendances *caisses des écoles* were to be started in every commune to assist necessitous children.

The law at first worked fairly well. For instance, in 1877 there were only 3,878,151 children on the registers out of 4,502,894, according to the census. But in 1882, the year of the passing of the law, the numbers enrolled rose to 4,425,690, which nearly corresponded with those of the census, 4,581,369. In 1887-8 the culminating point was reached, when there were 4,752,968 children on the books, against 4,729,511 given by the census.

present
position.

This surplus of apparent over real school population is due to the fact already mentioned, that in populous centres children are often inscribed on the books of two or more schools; but even if allowance is made for this phenomenon, the year 1888 appears to be the high-water mark of enrolments. There were only 4,591,606 pupils on the register in 1892 out of a census population of 4,663,671 and in 1897 the numbers had fallen to 4,465,166, against a possible 4,636,331 who should be in school. These figures are taken from the report of M. Cazes, inspecteur général at the Congrès International de l'Enseignement Primaire, which was held in Paris in 1900. The number of children not on the roll at all are estimated by the same authority at 4 per cent. It is clear from this and other statements that M. Cazes takes a less rosy view of the situation than the compilers of the official statistics. He goes on further to state that many of the children on the register attend the classes with only a relative regularity, and that only during five or six months. He especially blames the facilities under which the *certificat d'études* can be taken at eleven. The latter has become in rural districts for pupils, whether they succeed or fail, a signal for departure *en masse*. The category of pupils from eleven to thirteen is thus reduced to an extremely weak contingent; or even to vanishing point. As a mean, a quarter and sometimes a third of the total effective disappears, either to be made use of at home or to be let out to look after the cattle.* This "nightmare of the teachers" is evidently widespread. I came across it as far afield as in the *Bulletin des Indigènes* of Algiers, in which the writer consoles himself for the deficiencies in the "roll call" of the rural schools of that country by a comparison with the state of things existing in France, which he brings home to his readers by several quotations from inspectors and others on the subject. Thus one writes: "In a composition of the *certificat d'études* a candidate said quite innocently, 'In winter one has nothing to do, so one goes to school.' This child did not suspect he was translating the thoughts of all his comrades in the country, and even of their families. When we happen to meet at the side of the road under a hedge of eglantine three children in charge of a goat, we ask ourselves very seriously if there are not at least two too many. It is these two children we must get into the school by using all possible expedients." It is to these defects that no doubt the Ministerial circular of July 10th, 1895, alludes when it speaks of children losing one-fifth, one-quarter, and even a third of their school time.†

I did not come across these documents till some time after the

* "After the very precise reports of the Academy Inspectors it is only during five, or at most six, months of the year that the pupils attend with relative regularity."—(Rapport E. P.).

† "Very often the rural schools are reduced during the summer to a fifth or a sixth of their winter effective. With the first fine days there only remain in class the few candidates for the *certificat d'études* and the very young children who are unable to be of service to their parents."—(Rapport E. P.).

termination of my tour. In fact, it was only gradually I obtained a clear view of the attendance problem in its various manifestations. Like many others, I had been misled by much which had been written in England about our own shortcomings, and particularly by the circumstantial account of the derelict million,* which phrase, like the legend of the French minister and his watch, seems likely to make the tour of the world, so that I naturally fancied that we were the only nation whose country folk regarded their educational duties lightly. The first registers I examined threw little light on the actual position of affairs. But by dint of speaking to all I met on the subject, I gradually discovered a similar state of things existing to what M. Cazes has described. I finally learnt that in the country districts, in which the evils alluded to by M. Cazes are most patent, the teachers remove from the "roll call" the name of any pupil who leaves the school in May and take away his books, and only replace his name when he returns in November or December, if he returns at all. In this way the total of absences is reduced, as far as the register is concerned, and the only figures that give a clue to the real situation are the numbers of pupils enrolled *per mensem*, which, at the worst periods, drops a quarter and even a third below the record of the highest months. The teacher is probably within his rights in removing the child's name; in fact, there would otherwise be no reason for the column of monthly enrolments. Besides, the child often leaves the parish and goes right away for the time. The only thing is that any calculation of the average attendance on the monthly basis is quite misleading; and, indeed, the statisticians at headquarters adopt this view, as they take for their basis the total enrolment of the year. Wishing to find out which were the worst months for average attendance, I have made a statistical table of some eighteen registers I copied or made extracts of. As far as my very limited experiences go, September

A source
of leakage

* A good example of how such alarmist figures are arrived at is given in a letter signed "L.S.B.," which appeared in the "Westminster Gazette," June 5th, 1901, analysing the statement that 100,000 children are absent every day from the London schools, and that these are nearly always the same children. Relying on detailed information published by the School Board, the writer first deducts 38,000 infants. Occasional absence in the cases of such tender babes can scarcely be stigmatised as truancy. This leaves 62,000. A fresh deduction of 33,000 scholars over seven or eight years of age who are ill or excluded because of illness in the home brings the total down to 29,000. From this again must be deducted the absences of some 14,000 regular attendants at a wedding, funeral, or for some other good or fairly reasonable excuse. From the 15,000 thus left 3,000 may be taken off for those who are fairly regular, but were absent on this particular day without good excuse. This reduces the total to 12,000, and here again another thousand must be deducted for those whose names are wisely not removed from the books of one school until they are safely inscribed on the books of another. The famous 100,000 is thus reduced to 11,000. These are certainly not nearly always the same children, though many of them may be classed as "regular irregulars." They require, in fact, very careful sifting out, and "each case has to be dealt with on its merits, and neither sweeping generalisations nor rhetorical exaggerations meet the case."

Class or School.	Months.												Taking the attendance for the best months at 100, the worse months with the percentages in round numbers were—
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	July.		
(1) - - -	18	42	40	44	36	36	40	28	42	42	32	Sept., 42%.	
(1A) - - -	19	19	32	31	-	-	-	-	-	-	-	Sept., 60%—Oct., 60%.	
(2) - - -	23	36	37	37	37	39	40	44	45	45	43	Sept., 73%.	
(2A) - - -	-	37	37	37	37	39	-	-	-	-	-	Excellent.	
(3) - - -	36	38	40	41	41	42	44	38	43	39	37	Sept., 82%.	
(4) - - -	38	40	42	40	33	38	42	45	45	44	43	Dec., 73%.	
(5) - - -	9	24	24	24	25	25	25	25	-	-	-	Sept., 86%, otherwise excellent—96%.	
(5A) - - -	-	-	-	-	14	15	14	14	-	-	-	Excellent.	
(6) - - -	30	30	30	30	-	-	-	-	-	-	-	100%—religious school.	
(7) - - -	19	21	22	22	22	22	-	-	-	-	-	86% } good.	
(8) - - -	29	28	30	33	33	33	-	-	-	-	-	85% }	
(9) - - -	40	48	51	50	51	51	51	52	-	-	-	Sept., 77%, otherwise good ones—92%.	
(10) - - -	36	41	44	51	-	-	-	-	-	-	-	Sept., 71%—Oct., 80%.	
(11) - - -	33	31	30	30	33	32	31	29	-	-	-	April, 88%—good.	
(12) - - -	18	57	58	67	70	70	-	-	-	-	-	Oct., 81%—Sept. and Nov., 83%.	
(15) - - -	28	32	39	40	43	43	43	40	-	-	-	Sept., 65%—Oct., 74%.	
(13A) - - -	32	33	32	31	31	31	32	32	-	-	-	Excellent.	
(14) - - -	28 in summer. 35 in winter.												80% in summer.

The reason for only some months being copied was that the main object at the time was to obtain the highest and lowest figure only.

and October seem to be the worst months, and this conclusion was substantiated by numerous conversations with the teachers. It should, however, be borne in mind that the school year does not begin till about the 20th of September, and it takes the schools a little time to get under way.

Assuming a difference of about 12 per cent., which is roughly the difference in the official figures between the monthly average and the average on one day in the month, the average attendance on one day in the worst months would be at 35 per cent., 38 per cent., 53 per cent., 57 per cent., 62 per cent., 64 per cent., etc., of the total enrolment.

The majority of teachers in these schools not only spoke to me about these regrettable absences, but also complained of the difficulties of teaching these "Ins and Outs." The child which left in May had forgotten everything by December. I was surprised to find this juvenile exodus extended even to the towns. The head of the excellent *école d'application* (practising school) at Alençon told me on my arrival that several children had just quitted the school to go into the country as *patours*, such being the picturesque local term derived directly from the Latin for these youthful keepers of sheep. In the country, of course, I came across a fair number of schools which suffer from the periodic exodus of these nomads, but the custom did not appear to be universal. It seemed, on the contrary, to be mainly confined to the forest and grazing districts; and this conclusion was borne out by what the secretary to the Academy Inspector of Loir-et-Cher told me. He said the school attendance was bad in the north, where in some cantons the school population fell to a third during the *patour* season, while it was good in the south, where the vine culture keeps the children at home in their own villages. The grazing season also affects the attendance in Indre-et-Loire to the extent of a tenth, according to one of the inspectors of Tours. A minor cause for dissatisfaction among the teachers in the Loire district was the absence of the children during the grape gathering. Many teachers likewise complained of the irregular attendance of the children during the week of the first communion, and sometimes even during the month that preceded it.* I myself was witness in one school of the gap it makes. Out of a class of twenty-five girls only eighteen were present; the rest were attending the catechism classes at church. It is only fair to state that the children are allowed a three days' furlough during this important epoch. But the teachers' grievance was that not only the attendance but also the work suffered. One teacher, who marks the composition done by his class, said it affected the candidates' work for several weeks to the extent of a third. This may, however, be taken as

* This point seems to have been important enough to form the subject of a separate resolution at the International Congress on Primary Education at Paris, in 1900. "Il est nécessaire que l'enseignement religieux soit, hors des sanctions effectives, maintenu strictement dans les conditions légales, de manière qu'il ne fasse pas échec à la fréquentation scolaire."—(*Résolution IX.*)

proof that their energies are really absorbed elsewhere. This question of the *première communion* is also sometimes, peradventure, a little personal matter between *cure* and teacher. Some teachers stated it gave them little trouble, and another expressly said that the *cure* in his parish never attempted to withdraw the children from school at all.

Minor
causes of
irregularity.

In the grass country I heard complaints of the children being absent during the haysel, and in the cider country during apple picking. A few teachers attributed the irregularity in attendance to the distance the children had to come, the communes being apparently larger, as a rule, than our parishes, and there being no legal limit beyond which children are not obliged to attend.* I came across children who have to trudge to school three miles there and back every day, except Thursday, which is a whole holiday. In one or two schools Monday is a bad day for attendance, as the parents make it a day off for the children as well as themselves. These are, however, but minor grievances in comparison with the infant *patours*, and their solid six months absence from school.

Monthly Attendance of those on the Books.

Appended are a few of the best and worst averages of attendance on the actual numbers enrolled for the month.

	Best Months.	Worst Months.
1. St. Aubin (boys) - - -	Nov., over 95%	April, over 80%
2. Douvres (boys) - - -	Nov., over 97%	March, 81%
2A. Douvres (girls) - - -	Jan., over 99%	March, over 84%
3. Ouilly (boys)- - -	Feb., over 95%	May, over 84%
4. Coquainvilliers (mixed) - -	{ Sept. } over 95%	Jan., over 70%
	{ July }	(measles)
5. Vimontiers (boys)- - -	Nov., over 95%	Feb., over 81%
6. Vimontiers (religious, boys) -	Sept.-Oct., 100%	Feb., over 76%
7. Vimontiers (girls) - - -	Sept., over 97%	Oct., over 92%
8. Mauvaisvilliers (mixed) - -	Sept., over 93%	Feb., over 69%
9. Beaumont (girls) - - -	Sept., over 99%	Dec., over 92%
10. St. Paterne (mixed) - - -	Sept., over 93%	(on 51 pupils !)
		Feb., over 71%
11. Neufchâtel (boys) - - -	Sept., over 97%	Feb., over 77%
12. Beaumont (boys) - - -	Sept., over 99%	Dec., over 92%
13. Loué (boys) - - -	Sept., over 99%	March, over 87%
14. Chaussée St. Victor - - -	Dec., over 97%	Jan., over 90%
15. St. Denis-la-Victoire - - -	May, over 96 %	March, over 63%
		(sickness)

* Except in the case of a hamlet three kilomètres from the "town" part of the commune and containing at least twenty children of school age.—(*Gobron*, 2 523.)

These figures show that the attendance of those actually on the books is pretty regular. In many cases the register for the year was not copied, but only the months giving the highest and lowest figures.

The principal cause of the persistency of the present somewhat unsatisfactory situation is imputed to the fact that the "*commissions scolaires*" entrusted with the putting the law into motion have either always remained or else become a dead letter, except in Paris and a few places. The indirect reason which has led to this is the *loi Goblet* of 1884, which granted to the communes the right of electing their own *conseillers municipaux*, by whom the mayor is chosen. As a political measure of decentralisation it was probably wise, but it exposed the mayor as head of the *commission scolaire* to the enmity of those parents against whom he may have set the law in motion, and who vented their displeasure by casting their votes at the ensuing election for his political opponents. The consequence was that several mayors who had been zealous in the cause of education lost their seats. Their successors, more wary, showed a natural reluctance to pull the chestnuts out of the fire. The consequence was that the *commissions scolaires*, after a promising beginning, not only ceased to extend, but those which were in full activity came to an untimely end.*

The real cause of the present state of things.

Various remedies have been proposed to improve the existing state of affairs. Some reformers would suppress the *commission scolaire*, and hand over the whole business to the *juge de paix*, or local magistrate, leaving the teachers to prosecute. This is certain to work badly, as it would bring the teachers into direct collision with the parents. The International Congress decided to recommend the suppression of the *délégués cantonaux*, who formed part of the commission, and substitute for the commission itself a *conseil d'école*, who will merely act as school patrons. If their recommendations are carried out, it will be the duty of the mayor to draw up a list of the children of school age and send it to the inspectors. The latter, if necessary, will hale the offending parents before the *juge de paix*. The surveillance over the religious schools, whose registers, it is said, are not kept so strictly as those of the State schools, is also to be rendered more real. The *caisses des écoles*, which, though compulsory, were in 1895 still wanting in more than half the schools of France, are to be maintained, and no candidate for the *certificat d'études* is to be accepted who is not twelve years of age on the 1st of October in the year he presents himself.

Proposed remedies.

A judicious application of the law of 1882, with the power of instituting proceedings assigned to the inspector, would probably be a valuable help to improving school attendances. But anything

Possible limits to legal remedies.

*One hypothesis for the unsatisfactory state of affairs is mentioned by the Academy Inspector of Sarthe in his report for 1895. "Can it be true," he writes, "as I have heard former teachers say, that the attendance was more regular when the schools had fees? Parents wanted their money's worth then; but to-day, as the schooling is free, it seems to have lost its value."

like a wholesale setting in motion of legal machinery would seem a dangerous proceeding, and likely to do more harm than good in the rural districts, where the peasants are generally ultra-conservative and local usages and prejudices are strong. This opinion, such as it is, was borne in upon me by various conversations with some of the most experienced inspectors, some of whom even went so far as to think that an amendment of the law would do but little good, and favoured other specifics.

The personal
factor—(a)
Inspectors.

Thus one of the best inspectors I met informed me that under the old regulations he had set the law in motion against various parents. He had caused several to be fined and one actually to be put in prison. Complete failure attended his efforts. *Rien n'a abouti*. Feeling he was on the wrong tack, he thought the matter over, and came to the conclusion that evidently there were times and seasons when the peasants had really need of their children. He accordingly instructed the teachers to inform the parents that the inspector would always favourably entertain a request for leave of absence if the work was specified for which the children were required, such as pea-picking, etc. After eighteen years' experience he had found the system answer extremely well. Another way of keeping children at school was to discourage the teachers from presenting their pupils before twelve years of age for the *certificat*. Let them tell the parents there was a distinct advantage for the child to remain at school, that the age between eleven and thirteen was the most important, and so in his circonscription the custom was to present children between twelve and thirteen. This suggestion is also strongly supported in the report of M. Cazes, who proposes to raise the legal age of the *certificat* to twelve.

) Teachers.

In the same report M. Cazes equally insists on the personal influence of the teacher being brought to bear on the recalcitrant parent. It is significant to note that this influence, according to the teacher at Carpiquet, who is a partisan of the idea, is much greater with the parents of those who have received some education than with those who are illiterate. M. Petit, the primary inspector at Argentan, was also strong on the personal influence of the teacher as one of the principal factors in the solution of the problem. The head teacher in the girls' school at Vimoutiers told me she always made a point of sending round an assistant to inquire about any child who was absent, or of asking the neighbours, and she found the system answer very well. At the same time, a regular system of official notification to parents of the children's absences, with fortnightly reports, would probably defeat the very aim for which it is proposed. The whole strength of the teacher's interference in the matter is that his action is a purely voluntary one. Another objection to the proposal is that it lays yet another burden on the already hard-worked teacher.*

* A preferable form of the proposal is that of the Academy Inspector of Corrèze, who proposes in future to take into consideration, in questions of promotions, the efforts made by the teachers to improve the attendance at their school.—(Revue Péd., July, 1900.) (See Appendix II.)

It is interesting to note that some of the higher officials are in **Half-time.** favour of introducing some system of half-time. M. Le Chevallier, the Academy Inspector at Alençon, entertains the idea of reducing the obligatory age to twelve, with a system of half-time up to fifteen, just the period when education is most profitable. I trust I am betraying no secrets when I say he proposes shortly to lay a scheme to that effect before the Conseil Général of the Department. It will be worth while watching the fortunes of this unconscious imitation of the Robson Act in France, or rather improvement on it. The proposed extension to fifteen, if successful, will be a most interesting experiment. M. Périé, the Academy Inspector in Loir-et-Cher, in his annual charge to the department, urges that the school period should be prolonged, and suggests one method of doing this would be the adoption of the half-time school, whether for half the day or half the year—organised very differently to suit local needs and customs. This is actually, I am told, done in certain mountainous districts in France, where the half-day school is already a fact.

This adaptation of the school to local needs is also urged by M. Cazes in his report, which is really the digest and summary of five *mémoires* on the subject. He also adds it is already done in a large number of departments :—

Adaptation
to local
needs.

It conciliates thereby the exigencies of education with the real needs of the majority of rural families. These people at certain seasons, sometimes in autumn, more often in summer, can scarcely do without their children's assistance in agricultural work. There is urgent work which cannot be put off, and which imperiously requires the energies of the entire family. These are respectable exigencies, which one must always take into consideration. Besides, the majority of rural families, except in certain specially favoured districts, live in a state of tight means, which does not go as far as actual want, thanks to the unremitting toil and spirit of thrift which are characteristic of the French peasant but, which is not the less real for that. We have not to examine here economic and scientific causes ; but it is a general fact that the majority of our rural population can only, by dint of toil and privation supply the principal needs of their existence. It is therefore a necessity, at the same time as it is a duty, to conciliate two interests—the interest of living and the interest of self-education—with a view to being able to live better.

M. Cazes further notes that in Germany, in order to conciliate the needs of the family with the school interests, the holidays are so disposed that the children can help their parents without interrupting their studies on that account. Thus, at the moment of the potato harvest in the Rhine provinces, the children receive eight days' holiday. These are called the potato holidays (*Kartoffel-ferien*). M. Cazes continues :—

The Academy inspectors have taken pains in their respective departments to render the school practical in summer as well as in winter, in modifying, after consulting the teacher, and with the approbation of the council of the department, the hours of beginning and ending school, and the length of the school hours. In the same way they have advanced or deferred, according as it was necessary, the date of the holidays, in order to make them coincide as far as possible with the occupations of the country.

. . . . Perhaps it would be better if the holidays were not given

simultaneously everywhere during the same season, whatever may be the agricultural character of the region, but divided into two, and spread over the weeks during which the work of the field requires child labour. Such a measure would have another advantage, that of attaching the child early to the soil, in giving him the opportunity of taking a part and interesting himself in country life, of having his share in these labours performed in common, and which in our country districts have an element of joyfulness about them. (Extract from *mémoire* by M. Devimeux.)

English observers, and especially members of the Agricultural Educational Association, will, no doubt, be interested to learn that there is a distinct movement in educational circles among the teachers as well as among those higher in the scale to do something for rural education in its widest sense. The whole passage is also in other ways full of significance which should not be lost on English readers.

The Caisses
des écoles

And lastly, there is little doubt if the *caisses des écoles* are more widely and liberally organised they may, at least as far as the indigent children go, largely aid in winning back these waifs and strays to the school. According to M. Meslet, the Primary Inspector of Le Mans, many of these little *patours* are miserably paid. They often receive no more than their keep, and 25 to 35 francs for their six months' service. Were the *caisses des écoles* properly organised one could give to the parents of those who were really indigent an indemnity sufficient to persuade them to leave their children at the school, though what the farmers would say who live in the districts where there are no hedgerows must be left to the imagination.

The English
problem.

We in England have much the same difficulties, although, as I hope to show, the rural problem is more or less different. Our law on compulsory attendance is certainly at times faultily administered, because it comes into collision with the local customs and prejudices, which are not always necessarily based either on ignorance or greed, and because, at least in our big cities, the question is bound up with much deeper problems, not merely with the question of the feeding of hungry or starving school children but with the whole problem of the attitude of the State towards its poor in general, a problem which is rarely, if ever, directly mooted, but which is raised every time the head of some struggling family is summoned for not sending its little breadwinners to school.

Punctuality.

I asked in several schools about the punctuality of the children, and heard but few complaints. However, in Indre-et-Loire at least, the academy inspector makes the want of it in the schools the subject of a serious complaint in his report (1898):—

There is a lack of punctuality in a large number of pupils in a great number of schools. Teachers are specially ordered to take the call-over at the right time, and at once mark the absentees. Owing to the lack of punctuality and to non-attendance, a quarter of the pupils do not derive half the profit they ought from their sojourn at school. (Shortened account.)

CHAPTER IV.—ORGANISATION AND CURRICULUM.

ORGANISATION OF THE STATE SCHOOLS.

Primary schools are officially divided into three grades or standards—*cours élémentaire*, *cours moyen*, *cours supérieur*—which are supposed to correspond with the ages 6–9, 9–11, 11–13. These divisions appear to be rather *factice* in country schools. The *cours supérieur* is more or less a blank, as the great bulk of the children leave after passing the *certificat d'études*, which is regarded as the crown of the studies of the *cours moyen*. On the other hand, in many schools there is a *cours préparatoire*, which precedes the *cours élémentaire*, and these divisions seem to suit the work of the school to judge by a paper on the subject recently issued by the new society of "*Amicales*." The teachers are, of course, allowed to split these *cours* up into divisions, which are generally two in number, as a pupil stays, as a rule, two years in each *cours*. Promotion, however, does not take place by years, as in Germany, but is at the teacher's discretion.

Although the legal age of leaving is thirteen, the *certificat* examination is, as has been already stated, the signal for a general exodus of the mass of the pupils. M. Petit, the Primary Inspector at Argentan, kindly gave me some interesting facts in support of his assertion that the majority of children in his circonscription go to work at twelve. When he enters an ordinary school of thirty scholars he asks who are over twelve, and only three or four children lift their hands. As for the children over thirteen, they are still more rare. In one canton of his circonscription, with 453 children, only nine boys out of 243 and two girls out of 210 are over thirteen, while for the whole circonscription, with 7,121 children, only 157 boys out of 3,894 and 69 girls out of 3,227 are over the legal age.

In schools with a single teacher, my friend, M. Flamand, Primary Inspector of Paris, informs me that those pupils who have gained the *certificat* "double" the last year except in arithmetic, in which they do separate problems—that is, they go over the ground again, probably in a more thorough fashion. In many schools, however, one or two of these children are coached either gratis or for a small fee by the teacher with a view to entering the normal schools. In the large centres of population there are, of course, either *cours complémentaires* (ex-standard classes) or higher primary schools (see pp. 181 and 182).

According to the law, classes over fifty have a right to an additional teacher. The population in most of the communes I visited being on the down grade, the number of schools with an *adjoint*, except in the small country towns, was comparatively rare. The classes themselves in Orne, for three of the arrondissements, average from between twenty and thirty for the mixed schools, and in the fourth (Domfront) from thirty to forty.

The *cours*.

The leaving age.

The work of those who stop on.

Size of classes.

It was in Orne that I heard of a master with eighty pupils without an assistant, while a neighbouring teacher with seventy was in a similar plight. The reason for this large population was the sudden influx of a large number of *enfants moralement abandonnés*, which the city of Paris plants out with such good results in the country, and which number in all something like 50,000! These large classes under a single teacher are not infrequently equalled and even surpassed in Brittany, where large families are the rule among the villagers.* This information I received from the assistant secretary of the Academy Inspector at Alençon, who further assured me that the two schools I heard of were exceptions, and that not a tenth of the schools in the department, which were over fifty, were without an assistant teacher, and the greater number of these were only just over the legal limit. In the neighbourhood of Mosnes (Indre-et-Loire) I was informed that the average class was about forty. A teacher in the district told me he had been in charge of a school across the river of sixty boys. But the record school that I heard of was one of ninety-six boys, where the teacher had to struggle single-handed with only his wife to help him with the needlework. The reason of this unwonted size was that the commune was poor, and therefore unwilling to build a separate girls' school. It was in the same department that the inspector of Vendôme, M. Fusy, told me the average of the classes under him was between forty and fifty. Taking these and other data into consideration, it is probable that the average class in the districts I visited is rather under forty than over.†

* In Côtes-du-Nord eighteen mixed schools have altogether thirty-seven "classes," and 2,143 pupils, or an average of 119 pupils per school.

† The number for all France was 8,422 teachers with classes of over 50. The percentage of classes in France is 91.9 for classes of 50 and under, 5.7 for classes from 51-60 (inclusive), 1.7 for classes between 61-70 (inclusive), 0.5 from 71-80 (inclusive), and 0.2 over 80.

TIME TABLE.

School with a single Master. M = Master.
Commune of Mœuvres (Indre-et-Loire). A = Assistant (Monitor), Boys' School.

Time of Lessons -	8.25—8.30	8.30—8.50	8.50—9.20	9.20—9.35	9.35—9.55	9.55—10.10	10.10—10.30	10.30—11.10	11.10—11.30
Length of Lessons -	5 minutes.	20 minutes.	30 minutes.	15 minutes.	minutes.	15 minutes.	30 minutes.	40 minutes.	30 minutes.
Higher Class -	Inspection of cleanliness; entry with singing; call over.	Moral Instruction. (Mon., Wed., Sat.)	Dictation common to the two first classes. (Mon., Wed., Sat.)	Pupils prepare their French exercise, given the day before.	Preparation of exercise and lesson.	Interval.—Exit and entry with singing; ventilation of the class-room.	Correction of exercise; saying of lesson; new exercise; French composition (Tu. and Fri.). M.	History (Mon., Wed., Sat.)	Drawing. (Tues. and Fri.)
Middle Class -		Civic Instruction. (Tues. and Fri.)	French composition. (Tues. and Fri.) M.	Pupils prepare their French exercise, given the day before.	Correction of exercise; saying of lesson; fresh exercise; French composition (Tu. and Fri.). M.		Writing of exercise just given.	Geography (Tues. and Fri.)	Writing. (Mon., Wed., Sat.)
• auxiliary Class -		Lesson common to all the classes.	Reading. M. & A.	Correction of exercises; saying of lessons; fresh exercise; fresh lessons. M.	Writing the exercise which has just been given.		Writing of exercise just given and study of the new lesson.	Lesson common to all the classes.	Lesson common to the first three classes.
Preparatory Class -		Master.	Reading. M. & A.	35 minutes. Exercise in language; dictation of the reading lesson on the blackboard. M. and A.			Reproduction of the reading lesson on slates or writing in copy-books.	Master.	Reading. M. and A.

INTERVAL—DINNER.

Time of Lessons	12.55—1.0	1.0—1.15	1.15—1.35	1.35—2.0	2.0—2.25	2.25—2.40	2.40—2.55	2.55—3.25	3.25—4.0
Length of Lessons	5 minutes.	15 minutes.	20 minutes.	25 minutes.	25 minutes.	15 minutes.	15 minutes.	30 minutes.	35 minutes.
Higher Class	Inspection of cleanliness; entry with singing; call over.	Preparation of the exercise and lesson given the day before. Arithmetic (Mon., Wed., Sat.).	Preparation of the lesson and exercise. Metric system (Tues. and Fri.).	Correction of exercise; saying of lesson; new exercise; new lesson. M.	Preparation of the lesson on science and agriculture.	Interval.—Exit and entry with singing; ventilation of class-room.		Agriculture or Science applied to agriculture or hygiene.	Reading. M (Mon., Tues., and Fri.) Recitation. M. (Wednesday.) Singing. (Sat.)
Middle Class		Preparation of the exercise and lesson given the day before. Arithmetic (M. m., Wed., Sat.).	Correction of exercise; saying of lesson; new exercise; new lesson. M.	Working out of new exercise (in arithmetic).	Preparation of the lesson on science and agriculture.	Lessons in practical agriculture at the season of pruning the trees or vines, or gardening.			
Elementary Class		Correction of the exercise; explanation of a new one (in arithmetic). M.	Working out a new exercise (in arithmetic). M.	Working out of new exercise.	Dictation. M.	Lesson common to all the classes.			Reading. M. and A. (Mon., Wed., Sat.) Recitation. M. and A. (Wed.) Singing. M. (Sat.)
Preparatory Class		Readings. M. and A.	Mental arithmetic. M. and A.	Arithmetic on the blackboard and on slates.	Writing. M. The Master looks after the class during dictation.				Reading of notes and references M. (Sat.)

TIME TABLE.—SCHOOLS WITH A SINGLE DEPARTMENT (TEACHER).

M = Master or Mistress.
A = Assistant (Monitor).

MORNING SCHOOL.

Class.	Entry.	Moral and Civic Instruction.	French.	Language (1 hour 25 minutes).		Inter-val.	History and Geography.	Writing and Drawing.	Remarks.
	10 min.	20 minutes.	25 minutes.	30 minutes.	30 minutes.	15 min.	40 minutes.	20 minutes.	
Higher Class.	Inspection of cleanliness. Call over. Entry into class singing.	Moral Instruction. (Mon., Wed. and Sat.).	Dictation common to the two first classes.	The pupils prepare the French exercise given the day before and study their grammar lesson.	Correction of the lesson given the day before and saying of the lesson. Explanation of new exercise and lesson. On Wednesday the exercise is a French essay.	Ventilation of the class room. Bentlies and exits are accompanied with singing.	Recitation of lesson as explained the day before with questions on this lesson. Explanation and fresh lesson. Lesson common to two top classes.	Drawing (Tues. and Frid.).	
Middle Class.		Civic Instruction. (Tues. and Fri.).	M. and A.	25 minutes given. Correction of the exercise of the day before and saying of lesson. Explanation of new exercise and lesson. On Wednesday the exercise is a French essay.	35 minutes. Preparation of French exercise which will be corrected next day. Study of new grammar lesson.		M. and A.	Writing (Mon., Wed. and Sat.).	
Elementary Class.		Lessons in Common. M.	25 minutes. Reading. M. and A.	25 minutes. Writing. A.	15 minutes. History (Mon., Wed. and Sat.), Geography (Tues. and Fri.). M. and A.		25 minutes. Exercise in language and short French exercise. M. and A.	15 min. Arithmetic. M. and A.	Lesson common to all the classes. M.

AFTERNOON SCHOOL.

Class.	Entry.	Metric System (Tues. and Fri.), Arithmetic (Mon., Wed. and Sat.).			Gymnastics and Singing.	Inter- val.	Reading and Recitation.	Object Lessons.	Observations.
	10 min.	1 hour 5 minutes.			15 minutes.	15 min.	45 minutes.	40 minutes.	
Higher Class.		30 minutes. Preparation of exercise and lesson given the day before.	35 minutes. Correction of exercise given the day before. Say- ing of lesson and questions. Explanation of new exercise and new lesson.		Gymnastics (Mon., Wed. and Sat.).	Entries and exits are Ventilation of class room.		Boys' School. Object lessons (Mon., Wed. and Sat.). Agriculture (Tues. and Fri.). Lesson in common. M.	Mixed schools under the direction of a male teacher will follow the time table of boys' schools with a single department; but the mistress of needlework will teach the manual work to the young girls in these schools from 3h. 20m. to 4h. during the object lessons in agricultural teaching. In the other mixed schools the boys will make a résumé of the reading lesson, or will take part in a reading lesson or conversation on agriculture followed, but only in the case of themselves, by another résumé.
Middle Class.		25 minutes. Correction of exercise given the day before. Recitation of lesson and questions. Explanation of new exercise and new lesson. M.	40 minutes. Preparation of exercise and lesson just given.		Singing (Tues. and Fri.).	Lesson common to the two top classes. M. and A.			
Lower Class.	Inspection of cleanliness. Entry with singing. Chill over.	25 minutes. Reading. M. and A.	20 minutes. Mental Arithmetic. M. and A.	20 minutes. Arithmetic (sums). A.	Lessons in common. M.	Compulsory Recreation. Accompanied by singing.		Girls' School. Manual work. Talks in Domestic Economy (Mon., Tues., Wed. and Sat.). Object lessons and Horticulture (Sat.). Lesson in common. M.	
							15 min. Reading on the black- board. M. and A.	25 min. Writing and Draw- ing Exercises after a model placed on the black- board. A.	

TIME TABLE—SCHOOL WITH TWO DEPARTMENTS.
Department of the Bigger Children (Middle Class and Higher Class).

MORNING SCHOOL.									
Class.	Entry.	Moral and Civic Instruction.	French Language, 1 hour 20 minutes.			Interval.	History and Geography.	Writing and Drawing.	
	10 minutes.	20 minutes.	20 minutes.	30 minutes.	30 minutes.	15 minutes.	40 minutes.	25 minutes.	
Higher Class.	Inspection of cleanliness : entry into class singing : call over.	Moral Instruction. (Monday, Wednesday, and Saturday.)	The pupils prepare the exercise and lesson given the day before. (On Wednesday the exercise is a French essay.)	Correction of exercise. Saying of lesson and questions. Explanation of fresh lesson and exercise.	Play. The exits and entrances are accompanied by singing. Ventilation of the class-room.	History. (Monday, Wednesday, and Saturday.) Geography. (Tuesday and Friday.) Lesson in common.	Writing. (Monday, Wednesday, and Saturday.)	Drawing. (Tuesday and Friday.) Lesson in common.	
Middle Class.		Dictation in common.	Correction of the exercise of the day before. Saying of the lesson and questions. Explanation of a fresh lesson and exercise.	The pupils prepare the exercise which will be corrected the next day, and study the new lesson of grammar. On Wednesday the exercise is a French essay.					
AFTERNOON SCHOOL.									
Class.	Entry.	Metric System (Tues. and Fri.) Arithmetic, Geometry (Mon., Wed., Sat.)		1 h.	Gymnastics and Singing.	Interval.	Reading and Recitation.	Object Lessons : Agricultural and Manual Work.	
	10 minutes.	35 minutes.	35 minutes.	15 minutes.	15 minutes.	15 minutes.	40 minutes.	40 minutes.	
Higher Class.	Inspection of cleanliness : entry singing : call over.	The pupils prepare the exercise and study the lesson given the day before.	Correction of exercise. Questions on the lesson given the day before. Explanation of the new lesson and the new exercise.	Gymnastics. (Monday, Wednesday, and Saturday.)	(Compulsory recreation. The exits and entrances take place singing. Ventilation of the class-room.)	Reading with explanations. (Monday, Tuesday, Wednesday, and Friday.)	Recitation. (Saturday.) Lesson in common.	Boys. Object Lessons. (Monday, Wednesday, Saturday.) Agriculture. (Tuesday and Friday.) Lesson in common.	Girls. Needlework, with talks on domestic economy. (Monday, Tuesday, Wednesday, and Friday.) Horticulture. (Saturday.)
Middle Class.		Correction of exercise. Questions on the lesson given the day before. Explanation of the new lesson and the new exercise.	The pupils prepare the exercise and study the lesson given the day before.	Singing. (Tuesday and Friday.)					

TIME TABLE.—SCHOOL WITH TWO DEPARTMENTS.
(Elementary Class and Infant Section.)

M = Master (or, Mistress)
A = Assistant (Monitor).

MORNING.

Class.	Entry.	Moral and Civic Instruction.	French.	Interval.	History and Geography.	Reading and Mental Arithmetic.	Writing and Singing.	Remarks.
	10 minutes.	25 minutes.	30 minutes.	15 minutes.	30 minutes.	25 minutes.	25 minutes.	
Elementary Class.	Inspection of cleanliness. Entry into class singing over.	Moral Instruction. (Mon., Wed., Fri., Sat.)	French Lesson (in common, Mon., Wed., and Sat.)	Compulsory interval. Exit and entrance performed with singing. Ventilation of school-room.	History. (Mon., Wed., and Sat.)	Reading. M. and A.	Writing. (Mon., Wed., and Sat.)	In girls' schools the reading and arithmetic lesson will be replaced by a lesson of gymnastics.
Infant Section.		Civic Instruction. (Tuesday.) Lesson in common.	Writing for Infant section Tues. & Fri. A.		Geography. (Tuesday and Friday.) Lesson in common. M.	Mental and Written Arithmetic. M. and A.	Singing. (Tuesday and Friday.) Lesson in common. M.	

AFTERNOON.

Class.	Entry.	Arithmetic and Metric System. 1 hour.	Reading.	Interval.	Object Lessons.	Drawing and Writing, Gymnastics, Recitation, and Manual Work.	Remarks.
	10 minutes.	30 minutes.	30 minutes.	15 minutes.	30 minutes.	25 minutes.	
Elementary Class.	Inspection of cleanliness. Entry into class singing. Call over.	Arithmetic. M. and A.	Reading. M. and A.	Compulsory interval. Exit and entrance of the class singing. Ventilation of school-room.	Boys' Schools. Object Lessons. Lesson in common. M.	Drawing. (Mon., Wed., and Sat.) Writing. (Tuesday and Friday.) Lesson in common. M.	In girls' schools the reading lesson on Tuesday will be replaced by a recitation lesson.
Infant Section.		Arithmetic. Written & Mental. At blackboard. On slates. M. and A.	Writing. (Mon. Wed. Sat.) Drawing. (Tues. and Fri.) M. and A.		Girls' Schools. Object Lessons. (Mon., Wed., and Sat.) Writing. (Tuesday and Friday.) Lesson in common. M.	Manual Work, 45 minutes, Mon., Wed. & Sat., with conversation on Domestic Economy. 25 minutes. Recitation. (Tuesday.) Drawing. (Friday.) Gymnastics. (Tuesday.) Lesson in common. M.	

Messrs. Bonaparte Wyse and Hughes-Dowling, in their excellent report on Manual and Practical Instruction in France, state that "monitors are not employed in French schools."

Monitors and mixed schools.

I found them, however, in use in certainly three-quarters of the schools I visited, and more especially in the mixed schools, where it would almost surpass the wit of man to do without them. Many children arrive, as one teacher said to me, who do not know how to read and write, and were it not for enlisting some of the older children to teach them, the whole work of the school would come to a standstill. In fact, their existence is not only tolerated but even officially recognised. In the *résumé* of one of the candidates for the *certificat d'aptitude*, the latter, in answer to a question as to how she would put out the work in a school where she was the only teacher, definitely assumed that she would have to employ monitors. These monitors are not, indeed, officially appointed. The top members of the highest class are generally but not invariably, told off in turn to take the juniors. They are, as a rule, only put on for the day, or at most for the week, and the greater number regard it as somewhat of an honour. In the specimen time-tables* (pp. 89-94) these monitors figure as *aide* (assistant). In one school (Mosnes), however, I found a regular monitor employed, as well as the emergency ones. I, unfortunately, forgot to ask whether he was remunerated, and at what rate. The school itself was a remarkable one in more ways than one. It was a boys' school with no less than 58 pupils, and the master was evidently an exceptional teacher. Still it seemed a very heavy task to handle this crowd of scholars of all ages, ranging from pupils of thirteen to children who had only been a day or two in the school, and were as yet but half acclimatised. There is no doubt the work of the single-handed teacher in the mixed school is no light one, as in addition to the class divisions there are also divisions of subjects according to sex. A female teacher at St. Paterne told me that owing to this reason she has sometimes as many as four or five divisions going at a time. This did not prevent her from appearing thoroughly contented with her work.

I subjoin a short excerpt from my notes, which describes a visit to an excellent mixed school at Coquainvilliers, in the circonscription of Pont l'Évêque. I have purposely left in many apparently irrelevant details in the hope they may give background and setting to the whole attitude of the average teacher towards the school and the neighbourhood.

Description of a mixed school.

Coquainvilliers.—School building is situated on the high road from Lisieux to Pont l'Évêque, facing the rich meadows of the Touque. Behind rise a ridge whose verdant slopes are dotted with apple trees in full bloom. School originally intended for boys, but with the decrease of the population the girls' school has been closed and the remaining pupils transferred to the boys' school. The teacher has thus seen his work doubled at a single

* I have to thank M. Javary, Primary Inspector of Tours, for these specimen time-tables in use in Indre-et-Loire.

stroke, but judging by the masterly way he has rearranged his teaching, it is not the children who have suffered. Present school population 42, out of a total population of 423, that is 10 per cent., against 20 per cent., the average in England, a terrible comment on the feeble natality. Cause of decrease in population not due to a decline among those engaged in agriculture, but to the closing of a bleaching factory, whereby eighty-four workmen were obliged to leave the commune. The works have never been reopened, which augurs ill for the fortune of the small manufacturers of the country. Under the old régime there were thirty-seven boys and thirty girls, the families of the artisans being larger than those of the peasants.

No congregational school in the neighbourhood. Children generally come at five years old. Many live a long way off, some at a distance of four kilometres. These are usually the first to arrive. Teacher held evening classes during February and April, but had only three pupils. The distances are too great. Most of those who attend are children who have gained the *certificat*. The commune is rich. Since the exodus of the artisans there are only the peasants left and they are all well off. Day labourers earn 3 francs 50 centimes a day during harvest, and 1 franc 50 centimes at other times, but they receive their food, and in many houses the cellar is left open. Carpenters earn 2.25 francs, and gardeners 2 francs a day, food always included. Little real want; only two poor families. The district essentially pastoral.

Most of the children lunch at the school. A good many parents pay a sou a day for the cooking of the children's food. The rest get it for nothing. There is no proper *caisse de l'école*, but the *bureau de bienfaisance*, or village charity, gives the teacher 50 francs at Christmas to buy *chaussettes* and *sabots* for the children. Being a grass country most wear clogs, as the wet meadows soon wear out the ordinary boots.

The teacher has no difficulty with the school attendance, except as regards the distance some children have to come. If a child is absent he makes inquiries, either through the postman or directly of the parents. His wife teaches sewing. She receives 50 francs from the commune, who also abandon to her the 15 francs the State gives as a grant in aid of these matters.

School well lighted on both sides. There is a school library in full swing, and pupils subscribe a trifle a month to buy a new book or two and take in a school paper.

Secretarial duties at the *mairie* rather heavy. They run to about one to one and a-half hours a day on an average. Pay, 200 francs. Work out of school amounts to about three hours. There are four divisions, teacher uses monitors *à tour de rôle*.

The children who have been in the playground form up and march in marking time. Children quiet, orderly, and well behaved without being cowed or timorous. The top class starts with a sum on the board; a girl and a boy severally explain its operations very clearly. It is hardly necessary to say that it deals with a concrete problem. Meanwhile the second group form up of their own accord into a reading circle round a monitor and read, but not too loud to disturb the others. Under the watchful eye of another monitor, whose solemn duties evidently impress him, the little mites at the far end of the room copy on to the blackboard each in turn $7 + 4 = 11$, $7 + 5 = 12$, etc., or write 510, 511, 512, etc. A cursory examination of the *cahier de roulement* shows that the writing is excellent and the books beautifully clean. An inspection of the children's *cahiers* leads to similar results. Scarcely a bad exercise book among the lot. Evidently a good all-round class. Children set to work without being told—a good sign. Master takes children of five and six and questions them on such totals as 6 and 8, 4 and 7. Intelligent answers, and children show a keen zest in the work. They also take places during the lesson. No very strong local accent. An orphan, *recueilli par l'état*, reads words of four syllables without hesitation and shows his *cahier*, which is very good. The

girls, according to the teacher, shine in French composition and the boys in arithmetic and science. The monitors for the day arrive before the class begins, put up the date, and get everything in readiness. Considering the visit was in every sense a surprise one, it was a real pleasure to see the children perform so well without any rehearsal whatever.

At one time men were eligible as directors of all types of educational institutions, not excluding the *écoles maternelles*! * But women are beginning to take their revenge to-day. This is noticeable in the case of the mixed schools, which, according to the law of October 30th, 1886, should be managed by female teachers. One of the reasons is probably the slight shortage in the supply of masters, due to economic reasons. Owing to the male teachers being obliged to put in a year at military training, female teachers can be procured at an earlier age. They are also paid less in the higher classes. Their employment likewise results in the saving of a hundred francs a year to the communes, which has to be found for the sewing mistress when the teacher is a man. I gathered a small sheaf of opinions on the subject, and I am sorry to say they were generally unfavourable to the employment of women. One critic declared that the children resented being under a woman; another asserted that it was bad for the manliness of the boys. A male teacher was bad for girls, but a female teacher was worse still for boys, as the boys' education was far more made or marred by the school and its influence than the girls', which rather depended on the home life. Another adversary of the change enlarged on the difficulties that beset the solitary female teacher in the small out-of-the-way communes; it was scarcely the place to send a lone woman.† On the other hand, there seems little doubt that for small children of both sexes a woman is certainly a better, more patient, and sympathetic teacher than the average man. But the French primary school teacher is really charged with a civic mission. Can a woman, as a rule, discharge this as effectively as a man?

THE CURRICULUM.

(I.) CONSTITUTION AND METHODS.

The law of the 28th March, 1882, sketched the curriculum for all grades of primary schools. The organic decree of January 18th, 1887, fixed the details of the programme for the elementary schools. It was to include "moral and civic instruction, reading and writing, the French language, arithmetic and the metric system, history and geography, especially that of France, object lessons, and elementary scientific notions, the elements of drawing, of singing and manual training, principally in their (!) application to agriculture, military and gymnastic exercises." The curriculum, as we have seen, is divided into three stages—the *cours élémentaire*, *cours moyen*, and *cours supérieur*. In addition, the programmes of the different

Origin and constitution.

* In Germany the heads of the primary schools for girls are men.

† Another argument in favour of the male teacher is his greater aptitude for giving agricultural teaching, or starting evening classes or lectures.

subjects, with the exception of history and geography, are not successive, but concentric—that is, the pupils make their acquaintance at the start with all the subjects in the programme, and simply widen the circle of their knowledge of each in the succeeding *cours*. The lower *cours* is that of initiation. The elementary notions of each order of study are presented to the pupils under their most familiar aspect, as much as possible by concrete examples. Special attention is paid at this period to the two indispensable tools of learning—reading and writing. The *cours moyen* has as objective the formation of a scientific basis of knowledge, and in the higher course the logical instincts of the child are to be especially developed. During this intellectual development of the pupil, neither his physical nor moral education is to be neglected, and alongside of the general education, and in many cases as a sort of logical deduction or outcome of it, appears the practical side, represented by the drawing, manual training, and notions of agriculture and horticulture inserted in the programme for boys, and by exercises in sewing and the notions of domestic economy for girls. The programmes annexed to the regulations of 1887 do not contain a mere cut and dried list of subjects to be taught. They sketch out for each *cours* and each subject the order in which the ideas will be presented, the steps the instruction should follow, and the limits it should not exceed. The three chapters into which the *cours* are divided under the heading of physical, intellectual, and moral education are preceded by a preface of general instructions, in which the object of the instruction given, the spirit by which it should be inspired, and the methods for rendering it fruitful are determined with great precision (see Rapport, E. P.). These instructions were mainly due to the inspiration of M. Jules Ferry, who further recommended to the profession the excellent teaching directions of M. Gréard. As the *Rapport sur l'Enseignement Primaire* says, they have had a great share in forming the mind and character of those who have since been trained to the profession.

Finally a model for school regulations was annexed to the decree of January 18th, to serve as a specimen for the composition of departmental regulations. This regulation has been adopted almost everywhere in its original form, except with a few exceptions made to suit local requirements. It lays down the conditions for the admission of the children, for the protection of the school and the class, for the order and length of the school studies, the hours of admission and dismissal, and of recreation, the question of the school furniture, discipline, leave of absence, etc.

The time-
able
(*horaire*).

Certain regulations are laid down for drawing up a satisfactory time-table, such as a proper allowance of intervals for recreation, the placing of the harder subjects in the morning, a daily lesson in *la morale*, and the division of the lessons on the French language in such a way that every day two hours are devoted to it. Scientific teaching is allotted 1 to 1½ hours a day; geography and history, with which is coupled civic instruction, about one hour; the teaching

of writing at least one hour in the elementary classes, with gradual reductions in the higher classes; the teaching of drawing two or three lessons a week; that of singing one to two hours a week; that of gymnastics at least one performance every other day in the afternoon; that of manual work, two to three hours a week. (For specimens of actual time-tables, see section on the organisation of the curriculum, pages 89-94.)

I had some difficulty in getting at a clear idea of the extent to which variety is permissible in the composition of the school time-tables. Of course, the fable of the minister and his watch, which still does duty on so many English platforms, has long been exploded in France, but it is none the less difficult to ascertain the precise extent to which a teacher has a free hand in drawing up the time-table. Thus at the outset of my voyage of discovery I was assured by one inspector that the teacher enjoyed considerable latitude in drawing up his time-table, subject, of course, to the control of the inspectors; and the impression I certainly received was that the teacher could not only exercise his ingenuity in arranging the time of his lessons, but had also a limited choice in the number of hours he allotted to it. Later on I was assured that all the teacher could do was merely to arrange the order of the hours given to each subject, which were themselves rigidly fixed. The truth, according to another inspector, was that variety in the main (the Paris schools apart) does not exist; only quasi-optional subjects were more or less dropped, such as physical exercises, manual work, and singing; and this was borne out by another speaker, who said the number of regulation hours per week was thirty, and if everything were taught, it would take up thirty-three to thirty-four hours. Evidently, therefore, some subjects had to be sacrificed. From later investigations, I am led to believe that this view is probably the correct one. But the whole investigation is interesting, as showing how easy it is to get an incorrect idea from even intelligent persons, if one has not the opportunity of "taking a second opinion."

According to the *Rapport sur l'Enseignement Primaire*, the work of the school is divided up into ten months, with the quantum for each month duly "plotted out," the eleventh month, July, being reserved for revision. In some of the departments under observation a modified edition of the State programme has been published with notes and comments, as in Calvados. In Orne a similar publication existed, but it was unfortunately out of print. The Academy Inspector assured me it differed but little from that of Calvados. I also secured in Indre-et-Loire, through the kindness of M. Peytraud, the Academy Inspector, a most interesting programme that had been put together by the inspectors and teachers in Indre-et-Loire for all subjects, including agricultural teaching, about which I was told, with a spice of malice, the departmental professor was not even consulted. The notion of this "time schedule" is not so much to tie

Extent of
elasticity
in the
time-table

The Plan
d'Études.
Preparation
of lessons.

down the master to accomplish so much within each month, as to indicate the rate of speed, and at the same time emphasise the more important points on which stress must be laid. The rate of speed thus prescribed allows for revision throughout, as every French lesson begins with a recapitulation of the preceding one, before new ground is broken, while weekly, or at least fortnightly "stocktakings" of the pupils' acquisitions in knowledge during the period are supposed to be provided for in the time-table. In addition teachers are advised to keep, and many of them do so, a note-book in which they record rough notes for their daily lessons, some of them giving a fairly complete *précis* of them, as well as having by them another for jotting down "happy thoughts" and "apt illustrations." The consequence is that the reading lesson, which formerly, it was generally supposed, could be "taken at sight," is now as much a subject of careful preparation as the others.

Methods.

The methods in vogue have a double object in view: to give the child the requisite quantity of intellectual baggage necessary for the social, political, and economic situation in which he has to live, and at the same time develop all his faculties. The motto, therefore, of the administration is not to teach much, but to teach well. *Non multa sed multum docere*. The memory is not to be overloaded; the intelligence, as far as possible, is to be brought into play. In subjects like French language and history, the mnemonic part is to be reduced to a minimum. The reading-book is made the centre of the teaching of French; the dictations are chosen rather for their literary or moral qualities than for their orthographical intricacies. Recitations and readings, in which the structure of the language is studied as it comes under the reader's eye, have largely superseded formal grammar and analysis. By the Ministerial circular of 1891, the examiners for the *certificat d'études* were asked to lay less stress on minor mistakes in spelling, and this year (1900) a Ministerial circular has been issued* which brushes aside a number of minute difficulties that the unscientific eighteenth century grammarians had discovered or invented, to the infinite relief of the French schoolboy, and also, be it said, of the luckless candidates in French examinations on this side of the Channel, who have hitherto been examined, as a rule, on the extraordinary theory that the proper way to master a language is to begin by learning all the exceptions. In fact, an immense effort has been made to render the schools really modern, and rid them of what may be called the mediæval and scholastic element, with its dogmatic manner of teaching, its committing to memory of abstract *formulae*, its catechismal method of set question and answer. The keyword of French State education to-day is to develop the intelligence rather than the memory, though some of

* At the time that this was written I was assured by the Minister of Public Instruction, M. G. Leygues, that a practical agreement with the French Academy on the moot points in the circular was in sight; since then it appears that the Academy has only yielded on a few points, which are embodied in a new circular that appeared in March, 1901. (See Appendix III.)

the teaching seems still formed with a view of turning out intelligence of a general pattern, rather than to develop the individual intellect, or let it grow as it will, according to the pedagogy at present in vogue in America. This "careful of the type" spirit seems to come out in what appears at times to be a rather excessive polishing of the answers of the children, especially in the lack of encouragement given by the teachers to answers which are only half right, though their general orientation is correct. Such a straining after "letter perfection" is very noticeable in the revisions, when a child will often put things in its own way, which is perfectly intelligible, but not so "finished" as the teacher's. This hankering of the master after his own *ipsissima verba* comes perilously near, at times, the old mnemonic defects of learning by heart, and goes far to deprive the child of the pleasure and experience of getting at his subject which is one of the best ways of whetting his curiosity, as he feels he is getting "warmer," and also of the stimulus that arises from a sense that he is acquiring something of his own by his own efforts. Another point that struck me was that the brunt of the debate between the teacher and the class fell too much on the "front bench" children, and especially on the top boy, who seemed at times to champion the learning of the whole form in a splendid isolation that recalled the Homeric use of ἥρκος. This tendency to take scant notice of the bottom of the form is due, I was told, to the fact that the promotions are yearly, but as the average stay in a *cours* is two years, only half the form go up at a time, so that the back bench of one year becomes the front bench the next. The practice, however, is not general. At Ecommoy, in a very large class, the teacher "took on" practically the whole form, and allowed no *κωφὰ πρόσωπα* at all; while at Alençon, in the excellent practising school attached to the *école normale* for male teachers, the director told me he made a point of putting the worst children in the "forefront of the battle," with the *principes* and *triarii* of the most steady children to support them.*

Books.—Except in the case of necessitous children pupils are obliged to buy their own books. The choice of any particular textbook rests with the teacher, as it is essential that all the members of the class should have the same book. (See Appendix IV.)

(ii.) THE SUBJECTS.

(a) *La morale.*

A passing visitor cannot pretend to have an exhaustive first hand knowledge of the teaching of every subject in the curriculum in the country schools, for this is a point in which books and reports are perhaps of less assistance in the way of supplementing one's stock of knowledge, or of giving an exact idea of what is being done, than in other parts of school organisation. Yet, believing it was essential, in order to understand the working of the whole,

*This practice seems very common in the primary schools of Berlin, where the short-sighted or hard of hearing children are generally placed in the front row, with the "duffers" directly behind them.

to get as much first hand knowledge as possible on the function of every part, I made it my business, when not listening to lessons on agriculture, to be present at as many other lessons as possible during my all too brief stay in the schools. Such experiences are necessarily fragmentary, but, given in their proper place, may help towards a reconstruction of the whole in the reader's mind.

La morale.

No subject has perhaps raised so much bitter discussion as the *morale*, which may be regarded as the corner-stone of the *enseignement laïque* or the *école sans Dieu*, as its opponents are pleased to call it, though they apparently overlook that the *devoirs envers Dieu*, or *l'idée de la Divinité*, figure at least in some, if not in all, programmes. The subject is such a burning one, it naturally formed one of the five topics chosen to be discussed at the International Congress this year. The report of M. Payot on the subject is, to use a homely expression, as full of facts as an egg is full of meat, and one would like to quote it *in extenso*.

During my visit in the provinces I was present at a certain number of *morale* lessons, and was agreeably surprised by the interest the children generally took in them. Whenever the teaching was practical, and bore on the daily life and ways of the school, or treated of some subject well within the ken of the children, it was easy to see the teacher possessed the ear of his audience. But if an abstruse *cas de conscience* was posed which required some subtlety to disentangle, or the teacher was too anxious to give a philosophic or dogmatic air to his teaching by entrenching himself behind a barbed wire fencing of maxims and formulæ, it was evident that even those children who attempted to follow him were painfully repeating by rote what he laid down, but their hearts were far from him. Judging by what I saw and heard, it seems clear that the clever teacher does not seek to ply his pupils with any cut and dry system of lay theology, but rather treats all these particular lessons as the informal *résumé* and logical exposition of what he is trying to teach at all hours of the day, in creating a moral atmosphere in his class, and making it a school for the will. To effect this he imparts to his teaching as a whole a certain cast and colouring by a judicious choice of subjects for reading or dictation, avoiding, however, the "goodie goodie" and the "namby pamby," and exercising great care not to overdo it, for morality is a sauce which requires careful dosing; or he utilises in a similar fashion his history lesson, not to distort actual facts, but to put in their proper light and setting men and deeds, that the jingo writers of school histories are too often prone to ignore. But his supreme desire is always to render his moral teaching homely and practical, without being trite, and instead of attempting the vain task of turning out diminutive philosophers at the age of 12, crammed with a few sterile formulæ, he leads his pupils from the narrow centre of duties towards self, to the wider circle of altruistic virtues, which round off the good man into a good citizen, showing them ever by concrete examples that if thrift is good, mutual assurance is better, or after explaining to

them the merits of temperance, he enlists them in the civic campaign against alcoholism ; or, going still further afield, unfolds to them the *raison d'être* of the *Loi Grammont* against cruelty to animals, and reveals to them that even the lower creatures have certain rights *vis-à-vis* to man ; or, taking again his morality into his agricultural teaching, he points out the claim to protection possessed by those birds whose services are useful to man. That the teaching in this respect is not always an idle thing, I myself met with a striking example. I was talking to a small boy at Trun, whom the master of the school kindly told off to show me to an hotel. In the course of our conversation, I discovered that, although only 14, he was a keen sportsman. So, when he spoke of the numerous birds in his father's garden, I remarked to him : " I suppose you are always potting at them ? " " Oh, no," he said, " I never shoot the useful birds. They do no end of good." And when I asked if his ideas were shared by the other boys, he said that most of the boys in his school thought as he did.

One criticism one feels inclined to address is that, in some teachers' Criticism.

hands, too much emphasis appears to be laid on the individualistic virtues, to the detriment of the social duties, which figure largely in the actual programme under the head of *solidarité*. If the teaching is to bear the full fruits of which it is capable, it must tend more to become a higher socialism, not in any narrow or doctrinaire sense, but a socialism in which the sense of devotion to the State and to the community occupies a larger place. Such, at least, was my impression, and it was apparently well founded, for this very point is brought out in the first of the propositions that the late Congress placed on its list, " that the new programmes direct all instruction towards a social education." I make no excuse for giving the rest of the propositions and recommendations, which are so interesting as affording a remarkably clear conspectus of the real aims and methods of this so often ill-understood subject.

Conclusions
of the
International
Congress.

1. Every question relative to religious teaching of a confessional nature is eliminated from the discussion of the Congress. 2. The aim of a " moral education " is to prepare in the child the honest man and the good citizen. 3. The teaching of " morals " rests on reason, that is on an enlightened conscience. It seeks to develop in the child the sense of sincerity, justice, goodness, and solidarity. It should be identical for boys and girls. It is independent of any religious confession without being hostile to any. 4. Moral instruction occupies the first place in the school. It is the object of a lesson or a conversation every day. It enters deeply into the teaching of all the other subjects. 5. The Congress considers that the one thing necessary in the child is to develop an energetic will, to give him the courage of right-doing, that courage which is rendered easy by the force of solid habits. To effect this, it is necessary to love him, to know him well, and render the teaching of morals attractive to him. In addition, it is necessary to seek to render children honest, courageous, and full of initiative, for an honest

man who does nothing is the accomplice of the evil he does not prevent. 6. The Congress, considering that we should bring up the child in such a way that he may later on be his own law-giver, considering that the child cannot be made better unless he co-operates voluntarily in his own education, is of opinion that a liberal discipline, which respects and loves the personality of the child, is the only one which can produce free men. 7. The Congress, considering that, the younger the child is, the less enlightened is his conscience, and that there are cases in which the master cannot justify in the eyes of the child the order he has given, is of opinion that a liberal discipline does not exclude the principle of obedience, but that the authority of the master ought gradually to efface itself as the conscience of the child grows—that it is only legitimate on condition of leading up the child to live one day under the sole authority of his conscience.

The Congress makes the following propositions:—

- (a) That the new programmes direct all instruction towards social education.
- (b) That laws be passed against the pornographic press, and against the exposure of indecent prints.
- (c) That all possible measures be taken to stamp out alcoholism.
- (d) That the publication and the diffusion of works, simple, attractive, and of a high moral inspiration should be encouraged (such works to include tales, biographies, and romances), such works to be placed in libraries for schools and for adults.

summary.

It will be seen from the above that the State does not dogmatically lay down that its teaching is all sufficient and all sufficing. It leaves the whole question of the extra religious sanctions afforded by the different cults open; there is nothing to prevent those parents who find the school morality insufficient from providing their children with the extra religious teaching two days a week if they think necessary. Some philosophers may cavil at some of the propositions, and others regard the portion reserved to the principle of authority as somewhat scanty, considering the amount the majority of us are obliged to take on trust, whether in municipal or government matters, involving often expert knowledge to which we can in no wise pretend, owing to the alarming complexity of modern life, so that if the school is to be the counterpart to real life, it seems necessary that a child should learn not only to understand but to trust its master. Once again, to touch on a still deeper matter, the teaching of *la morale* intentionally omits any reference to a future life, and to its bearing on daily conduct. There are some who will regard this and similar omissions as fatal to the real efficacy of the instruction given; others, on the contrary, will sympathise with the point of view of the French authorities, who

regard it as their duty to establish in the schools a form of moral instruction which is neutral in regard to questions of religious belief.*†

Closely allied to the *morale* is the *instruction civique*, which aims at giving the pupil a few essential notions on "the political, administrative, and judicial organisation of France." This side of the teaching is well illustrated by the collection of every-day documents and papers, to which allusion has already been made in describing the *classe modèle* at the Exhibition. It further aims at providing the elements of a civic education in inspiring in the pupils a love of their country and of the Republic. Being a somewhat abstract subject, it is often omitted from the *cours élémentaire*. It might probably be advantageous to suppress it as a separate subject, and attach it to the *morale*, which already shows tendencies of assimilating it. *Instruction civique.*

* The morale for girls has already been treated of in the *résumé* given of the eloquent lecture of the academy inspector for Loir-et-Cher at a Teachers' Conference. There is certainly nothing to take away from it, as it stands, nor would there have been much to add, if space had allowed of its being given full (see page 28).

† The following quotation, from a remarkable paper on the "Educational Lessons of the Paris Exposition," in the *Educational Review* (New York), September, 1901, by Miss A. Tolman Smith, my fellow juror on the Primary Jury, will help to illustrate and confirm my impressions of the teaching of "*la morale*":—"An immense impetus has recently been given to moral and civic instruction. These subjects were indeed placed at the head of the programme in 1882, but for a long time they found only formal recognition. Suddenly they have become the central subjects. Everything else is subordinated to them or permeated by them. They are not to be taught in a cold didactic spirit, but in a manner to excite the imagination and the heart. In the official instruction the teacher is urged to inspire in the child the same regard for the notion of God as is excited when it is brought to his mind under the different form of religion. 'Teach the child,' says the ministerial circular, 'that the sincerest form of homage to the Divine is obedience to the laws of God as they are revealed to his conscience and to his reason.' Thus the ideal self is exalted above the material self. Insensibly, also, the teacher is drawn to a fuller appreciation of the child's nature; for to children the ethical, the idea in all its aspects, is much nearer than the material and the industrial. The child's mind is not scientific in its action, but philosophic in the naïve sense of the word; and the school is most effective when it approaches him through his innate sympathies."

APPENDIX.

The *école laïque* from the Catholic standpoint.

In September, 1900, an Irish Catholic paper attacked the *enseignement laïque* in France, and declared that "the present generation of children are little better than pagan. They sneer at religion, delight in insulting priests and nuns, and are steeped in every kind of immorality." This statement was challenged by the editor of the "Tablet" (who has kindly permitted me to make use of the article, appearing December 8th, 1900, from which this *résumé* is taken). Thereupon the editor of the Irish Catholic paper explained, in the most straightforward manner, that he would be reluctant to confirm some of the charges made, especially that of insulting priests and nuns, which he believed to be utterly groundless. He added that during the six or seven years he had spent in France, almost exclusively among French people and French students, he had visited many parts of the country, always wearing his clerical dress, yet he had scarcely a recollection of any insult ever offered to himself or to any priest or student of his acquaintance, though he had at times come in for a certain amount of rough chaff in the way of being greeted with onomatopoeic cries of *Quoi, quoi!*—a mode of salutation to which those in clerical dress are at times subjected. Wishing to learn the effect of the secularised schools on the morality of young people in France, he wrote to sundry friends among the French clergy living in different parts of the country, and asked the following questions:—

Three questions.

1. Are the schoolmasters and schoolmistresses appointed by the Government of the French Republic hostile to the clergy and to the Christian faith of the children of France?
2. Do they encourage the children to show disrespect to priests and nuns, and is such disrespect common?
3. What is the effect on the morality of youth of the education given in the primary schools?

The replies.

The replies, coming as they did from Catholic sources, are, as might be expected, naturally somewhat severe on the *école laïque*, though their condemnation of it is by no means universal. Yet when one considers they were written by members of a community which has seen itself deprived of its ancient suzerainty over the schools, one will willingly admit that, whatever may be the truth of their allegations, the tone, or even the undertone, of these letters is studiously moderate. To English readers, who are apt to ascribe to all French Catholics the unseemly violence of La Croix, these documents should come as a very pleasant surprise.

Unfortunately, lack of space forbids of printing them in full. An attempt will therefore be made to give brief summaries and extracts from the letters, as far as they bear on the question. The first is from a *vicaire* of St. Augustine, in Paris. After asserting that the laicisation was made with an object hostile to religion, in the sense of excluding all forms of religious instruction from the school, the writer makes the remarkable statement that, as things are, "I do not believe that it must be said generally that all the masters and mistresses of the *écoles laïques* are hostile to the clergy or the Christian beliefs of the French people, nor that they encourage the children to be wanting in respect towards the priests. It would be equally unjust to maintain as a general thesis that the teaching given in these schools injures the children from the moral point of view." A second letter from a *curé* in the Pas de Calais states: "Our academy inspectors, as well as all our teachers, male and female, are, above all, opportunists; that is to say, they regulate their behaviour according to the exigencies of the people among whom they find themselves. If the population is Christian and church-going (*pratiquante*), they show

themselves Christian, and even go to church. If not, not." The writer complains that even those of the teachers "who remain sincerely Christian have one and all the *esprit universitaire*, which is always hostile to the 'free schools' (*enseignement libre*), and which they necessarily communicate to their pupils. . . . A very small number of male teachers, and only a handful of female teachers, up to the present at least, are, and show themselves, hostile to the Christian beliefs. The bulk of the others preserve their faith, and more or less their religious habits. In respect to the clergy, in the eyes of *all* the male teachers, and of nine-tenths of the female teachers, they are really the adversary, the enemy. The teacher is embarrassed at having to reckon with them, and at bottom dislikes them." The writer does not believe the practice of inciting the pupils to insult the priests is prevalent. There are cases in which teachers, in a momentary fit of anger or from accountable (*motivé*) discontent, have stirred up (*lancé*) their pupils against the parish priests. As a rule the clergy are never insulted by the village children; when it happens at all, which it does rarely, it is by street urchins in populous centres. From the moral standpoint, the writer thinks there is no doubt about the harm done by the *manuels civiques*. They teach the children that it is lawful and advantageous to pursue worldly pleasures, such as balls, etc. The conduct of the teacher is not always a good model for the pupils. It produces at times "deplorable effects." The third letter, which comes from Savoy, states that "the official schools cannot be considered as absolutely bad. Whatever may be the personal opinions of the masters and mistresses of these schools, we have no reproach at all to make of them for a lack of respect which politeness, as much as Christian charity, would reprove. Here and there some village teacher may carry on an underhand war against the *curé*, but in front of his pupils he avoids any outbreak (*écart*) liable to bring him into bad odour with our people, who have remained profoundly Catholic. . . . The hostility of the official teaching to Catholicism is much less in the schools for girls. . . . These observations apply principally to primary education. In the *lycées* the ministrations of the priest have free exercise. In the faculties (universities) there exists a *régime* of perfect liberalism." The fourth correspondent, who writes from the centre of France (Nièvre), speaks of the complexity of the question. No fixed rule can be drawn about the teachers' behaviour. There are some communes and departments where the lay teachers have morning and afternoon prayers, teach the Catechism, etc. There are others in which the lay teachers observe the strictest religious neutrality in their teaching and conduct towards the children. There are others, again, where the lay teachers are hostile to the clergy and to catholic beliefs. The writer attributes this diversity to what he calls *l'anarchie gouvernementale*, due to the varying influences of different parties with the Government of the day and the instability of the parliamentary majority. A fifth correspondent, from the west (La Rochelle), alleges that in his department the lay schools are generally bad, and the teachers, as a rule, are hostile to the clergy; yet even this writer adds, "I do not believe that there are many who would venture to encourage the children to ridicule the priests or insult them. In an underhand fashion, and by malicious insinuations, there are perhaps some who go almost as far as that. I believe such cases to be very rare." One correspondent alone, whose name the editor, for intelligible reasons, does not publish, gives a practically unfavourable verdict. The recruitment of the lay teachers is detestable from the Catholic point of view. A professing Catholic finds it hard to get on in the profession. The education at the normal school is no less regrettable; there is neither chapel, almoner (chaplain), nor prayers. The writer makes the somewhat incomplete remark that the teachers are appointed by the prefects, ignoring thereby the *role* of the academy inspector, and dilates on the political influences that are thus brought into

play. The *morale* taught is without sanction; the tone in the communal schools is lower than in the "free schools," owing to the presence of foundlings, pauper children (*enfants moralement abandonnés*), etc. "It is difficult to give figures for morality; for criminality it is far easier, and even the official publications are obliged to admit that there is a formidable difference between the children from the communal schools and those from the religious schools."* The writer adds: "The teaching of *la morale naturelle ou civique* is generally nil, according to the admission of university inspectors, while the books the teacher is obliged to put in the hands of the pupils . . . contain for the most part the most violent attacks on religion."

There is obviously much that the supporters of the *école laïque* would naturally challenge in these letters, especially in the last, which forms, in fact, a very convenient *résumé* of the case as it is generally put against the *école laïque*. It will, no doubt, be noticed that not a few of the charges made have already been touched on or hinted at in the section dealing with the teaching of *la morale*. One may also, perhaps, point out that the word "hostile" implies in these letters several degrees of meaning, ranging from the sentiment of "he that is not with us is against us" to downright enmity, just as the word "religion" in the above passages is sometimes used to denote merely the Roman Catholic religion, while in others it seems capable of a wider significance. Things are obviously in a transition state in France. The religious difficulty is admittedly the fundamental problem, and Hotspurs are always to be met with on either side of any great question. If reference is made to the section on the position of the teacher as regards the religious question (page 38), it will be seen that in respect of hostility the other side have also something to say. The most satisfactory point in the whole correspondence is that, however much the teachers may differ fundamentally from the priests, there is no evidence to show that any general attempt is made by the teachers to transform what is at bottom a conflict of principles into a conflict of persons.

* I have not been able to find statistical authority for this statement, but those who desire further information on this point will find the whole question treated at length in the Rapport E. P., pages 292-3: the various causes of the increase in crime are discussed; it is pointed out that the criminality among children is in inverse proportion to the attendance at school, and it is directly stated that "despite the accusations inspired by the sectarian spirit, the *école laïque* cannot be rendered responsible for the increase in crime and vice." Those who wish to look further into the matter may consult an article by the well-known philosopher, M. Tarde, in the *Revue Pédagogique* of March 15th, 1897. "Is it," he asks, "among the regular scholars or among the children enrolled but not present that the personnel of the houses of correction is recruited? The registers of the latter inform us. We ascertain that on their entrance into these establishments the youthful delinquents disclose an ignorance much higher in proportion to that of honest children of the same age. I find in the penal statistics (1893) that only 2% of the boys have received a good primary education, and that 36% are completely illiterate. Thus one could say that the criminality of minors is in inverse ratio to their attendance at school, and it is proved that the latter, whether public or private, when they attend regularly, restrains them, be it admitted in an insufficient manner, but to a certain extent, on the road to crime."

(b) *The three R's.—Drawing.*

To judge by the alarmist *réclames* of the professors of caligraphy Writing. at the Exhibition, writing in the French State schools is going to the dogs. This was not, however, my impression from the majority of schools I went into. In the first three of the departments under observation the writing was uniformly good; the weakest I saw was in the neighbourhood of Tours. The attitude of the children at work was generally good. They did not stoop and pore too much over their work. Of the various styles, the upright writing seems to be gaining ground, and it certainly has the advantage of being the most legible. There seems to be more paper work in the French schools than with us, and this impression was confirmed by the experience of an English student teacher I met at Caen who had got leave to pass a year in a French training school. He seemed thoroughly satisfied with French hospitality. The fact seems worth mentioning here, as with the growing need for teachers who possess more than a smattering of foreign languages, a stay in a French normal school seems an excellent training.

Several teachers laid considerable stress on mental arithmetic, Arithmetic. at which some of the children showed themselves very expert. The arithmetic itself is not taught on the cookery-book system of putting an example on the board by way of recipe and getting the children to do a certain number like it, till the particular process to be acquired has been drummed and drilled into the form, but an effort is made from the outset to give the child certain notions about numbers, and build up the idea of addition, subtraction, etc., from these. The abstractness of the subject has been further reduced by the practice of making the children always handle concrete quantities, the majority of the subjects I saw upon the blackboard being questions connected with agriculture or housekeeping. On seeing the children so at home in the metric weights and measures, one regrets to think that our little ones have still to struggle with poles and roods and pecks and bushels. The metric system has, further, the great advantage of introducing to the child the scientific notions of superficies and volume which are connected with the concrete measures of area and capacity—notions which are hopelessly obscured in our kaleidoscopic method of measurement, in which gills are metamorphosed into pints, pints into quarts, quarts into gallons, at which point a new bifurcation comes in for wet or dry measurements which is hopelessly unscientific. Amid these successive transformations any idea of there being such a thing as a scientific unit of dimensions must be entirely lost to the child, and he can never rise beyond the idea that measures are a mere affair of pots for wet things and pans for dry. The rendering the metric system compulsory in the Code has been a great step forward. Perhaps in ten years' time we may

Metric system.

entertain reasonable hopes of rendering it compulsory generally. It is interesting to note that arithmetic, in the opinion of most teachers, is the subject girls take least kindly to, while in essay writing they usually beat the boys.

ortho-
graphy.

"The dictation—the favourite exercise of many masters—is only slowly losing the first place it has so long occupied in the teaching of French." This remark of the Academy Inspector of Indre-et-Loire is addressed to his own department. It has probably a considerably wider application. Still there has been a strong reaction against the standard formerly set by the *certificat d'études*, which might have led a stranger to suppose that the candidates, as far as spelling went, were going to take up literature as a career. The two orthographical reforms already alluded to have somewhat damaged this illusion. Spelling has at last been put in its place, and the bad custom of giving pupils words to spell that they have never seen is fast disappearing.

reading.

Owing to the terminations of French words, reading books in French in one syllable are fortunately impossible. On the other hand, if syllables are divided in the text, the number of syllables matters little, especially in French, where whole phrases are coupled together like a single word. French children learn to read in six or eight months, as the pronunciation, after one has mastered the syllables which are mute, is practically regular. The Academy Inspector of Indre-et-Loire makes a great point of teachers reading clearly. He is not against collective reading, provided that each word is clearly scanned. In one school I visited the children had a quaint fashion of taking up the reading one after another at the exact point their predecessor stopped at. They disregarded all such minor danger-signals as commas and semicolons, and even full stops failed to pull them up. Perhaps they fancied it was poetry, as they breathed for preference at the end of the line. But I venture to think this was a very isolated case. The chief fault of the children, as far as I could see, was the absence of *liaison*. The pronunciation was also rather *molle*, especially in Sarthe. Recitations are fairly numerous, and generally well done. As already stated, the reading lesson is made the *point de départ* for grammatical and other questions. Thus, in a fable that a child of twelve years of age recited from La Fontaine, the inspector questioned him on the gist of the story, made him paraphrase or give synonyms for one or two unusual expressions, asked him to parse a word or two, and explain a few grammatical difficulties. He wound up by demanding of the pupil the names of one or two rhetorical figures illustrated by the fable! In another school an inspector turned the reading lesson into a general information lesson.

Composition.

In the lower classes there is a growing tendency to keep reading and writing together. The principle is undoubtedly a sound one. From a spelling point of view, the hand should copy as soon as possible what the eye has visualised. Nor is

the auditory memory neglected; the reading lesson is largely utilised for verbal recitation, for the acquisition of vocabulary, and for practice in oral narration, which are the first steps towards regular composition. Well directed, this practice of oral narration proves no inconsiderable aid in promoting and directing the flow of the pupil's ideas when he arrives at regular essay writing. This helps to solve the chief difficulties for young children in all countries—"to have ideas and to find expression for them." Further aid is, however, necessary on the part of the teacher, especially in instructing the children how to write something that has a beginning, a middle, and an end. Some teachers place a model essay on the board, which the pupils read, mark, learn, and inwardly digest. The model is then effaced, and the children start writing, but it is often rather an exercise of memory than of intelligence. One of the best systems I came across was that of the head teacher of Beaumont-en-Sarthe, who adopted the collective method. Taking a subject like "Conscience," for instance, he asks every pupil his idea upon it, and probably elicits by "leading" questions anything not given directly by the class. All these ideas are written as they are received on the blackboard. This corresponds to the phase of invention. Then with the help of the children he classes them in their proper order (=disposition), and finally polishes the expressions (=locution). A truly excellent plan where all the children co-operate throughout, both in supplying materials and labour!

I saw but little drawing, which is probably neglected in most Drawing schools, as it is an alternative subject at the certificate with agricultural education. The report of the Academy Inspector of Indre-et-Loire confirms this impression. On the other hand, in the towns it appears to be well taught, according to the same document. It is worth noticing that the use of ruled paper for beginners in drawing is rapidly going out, even in the rural schools.

(c) *Geography and History.*

The teaching of geography commences with elementary Geography. notions of the world and the globe, and the nature of a map. It then comes back to what forms the starting point in German and English schools—the school building and its environment; for we think that geography, like charity, should begin at home. Map-drawing does not commence till the *cours moyen*. It is made a fairly strong point of. The terrible ignorance of the French in 1870 of the physical features of the country has led to a strong insistence on this point. In the few lessons at which I was present sufficient stress did not seem to be laid on physical features and their intimate relation with social and economic results. I find this criticism repeated in the report of the Academy Inspector of Indre-et-Loire. I saw occasionally maps of the commune, canton, and department hanging in the schools; many of them were the work of the teachers themselves. But, as the same authority

observes, every school ought to possess them. They make for local patriotism, and bring home to the child in the most concrete manner the notion of what "earth knowledge" means. In the same report the *promenade scolaire* is also insisted on. Its value for agricultural teaching is obvious. At the same time, teachers are encouraged to study the geography of the moment—i.e., of the Transvaal or China. It is impossible to teach the geography of the whole world, and the French programme frankly recognises the difficulty by thrusting the geography of all the countries except France and her colonies into a few lessons at the end of each school year. The ordinary school maps are usually boldly printed, but rather small in proportion to the size of many of the class-rooms. In one school-room I went into the map was so far from the bottom of the class that even the boldest lettering was indistinct. Some of the most interesting maps are those of the departments which represent the particular cultivation and industries of the various districts.

History.

Geography on the one side gives its hand to physical science; on the other it is regarded by French educationists as the complement of history. In some departments the concentric method (see above, p. 98) which prevails in other subjects is adopted in history, instead of the successive—that is, the same ground is ploughed over a second and even a third time, but with a deeper share. Here, again, the few lessons I was present at seem to some extent to fall under the following criticism of M. Javary, inspector at Tours :—

Facts accumulate in the memory of the child without order or perspective. All remains confused on the same plane, the essential facts as well as those of secondary importance, the nomenclature of which is a burden to the course.

French history, as it is generally written, with its glorious façade of military exploits—too often, alas! leading nowhere—seems to be a particularly difficult subject to teach. For inculcating patriotism there is enough and to spare. No country is richer in this respect, with its long bead-roll of heroes from Vercingetorix downwards, but to an English reader at least these wars and rumours of wars appear to take up a disproportionate place on the canvas, and the history of the social and economic greatness and grandeur of France, which to the student of human progress seems to be the most indestructible portion of her fame, does not always receive the attention it deserves, except in a few books like the "*Petite Histoire du Peuple Française*," of M. Lacombe. For if history touches geography on the one hand, it is intimately bound up with civic education on the other, being the archives of the divine tribunal, in which may be read not only the decision of the God of battles, but also the record of the issues of the social and economic efforts that a nation lives by, while its political lessons are too obvious to be insisted on. These purely personal impressions have lately been confirmed, and, indeed, surpassed, in a special report I have lately come across, prepared for the recent teachers' conference at Paris. The report begins by insisting that in a country

Reforms
in the air.

where universal suffrage prevails, and where the destinies of the nation are confided to those elected by the choice of the citizens, the future elector needs to be thoroughly enlightened in his rights and duties. The rôle of history is not "the dry enumeration of brilliant feats of arms, of sanguinary defeats, permanent cult of war and hatred, it is not the history of wars or of the court, but the history of all and of every day, the history of daily life and its trials, the history of work, of social progress, of mankind." The teaching of purely national history is insufficient for the education of the citizen of the modern republic. "It ought to be completed by succinct and precise general notions on the events of the political, social, moral, religious, and material history of humanity." This seems rather a large order. But if it goes too far in demanding impossibilities of the primary school, it is a fault on the right side. And after all, it is only an amplification of the general instructions laid down by the *Conseil Supérieur* on the teaching of history, which recommend the imparting of some knowledge of antiquity and the progress of civilisation, and in addition to the national history, that of other peoples', in as far as it throws light on and completes the history of France. The report goes on to quote M. Seignobos on the incompleteness of a history dealing only with wars and political revolutions, and the need of some sort of continuous social history. M. Lavissee is also cited on the utility of showing the workings of the indestructible energy of a people which has recreated its forces and founded in a few years a colonial empire, and lastly, quotations are given from M. Aulard, who urges that the effects of the Revolution, not merely in Paris, but in the provinces, nay, in the commune itself, should be brought home to the children by various means, including the research of contemporary documents by the teachers themselves. This suggestion has been very largely adopted by the thousand or so writers of village monographs at the Paris Exhibition. To give history a more prominent place in the curriculum, the *rapport* suggests its inclusion among the compulsory subjects of the *certificat*. The object of history teaching is to be "civic education." With the aim in view, it is proposed to make jettison of the lists of dynasties and recitals of war, in order to set in their place essential facts and landmarks, to retain only such typical anecdotes as are true; to add to them a running commentary on civilisation, and to encourage the cult and worship of heroes so necessary to a democracy.

(d) *Manual Training, Gymnastics, Military Exercises, Singing.*

Manual training has been largely described by Messrs. Bonaparte Wyse and Hughes-Dowling in their report, but, as they assert, it is practically a dead letter in the provinces, or at least in the rural schools. The academy inspector of Indre-et-Loire categorically states that it only exists in that department in the higher primary schools for boys, and asks if some of the simple and practical exer-

cises of the official programme are not within the means of all schools to undertake. In one or two cases teachers told me they did a little paper-folding and cardboard work, as at St. Aubin's (Calvados). I encountered one teacher at St. Aventin (Indre-et-Loire) who had a small bench for practical work, at which he makes models of barrels and such things as are required by vine growers or agriculturists. The children watch him while at work and try to copy what he makes at home. Above all, he teaches them how to mend tools and implements, a very useful thing for the French peasant, who, being of an economical turn, always tries to do his repairs himself. I fancy it was from this teacher, though I am not quite sure, I heard the story of some *travaux manuels* in carpentry being given out to the children of a certain commune to finish at home. The school authorities were delighted with the progress of the children until they discovered the village carpenter was making a handsome thing out of doing the children's work for them. But, as a rule, I found the *travaux manuels* is one of those subjects that has not caught on in the country. To begin with, many communes are poor and decline to make the necessary outlay. Then the programme is already full enough, and what manual work there is, is rather done in the teacher's garden or in the *champs d'expérience*. Moreover, as one teacher told me, a little learning is a dangerous thing, and a little manual training, unless on the right lines only gets the pupils into bad habits, which, a wood-cutter friend of his told him, only makes them worse apprentices than children who know nothing.

Gymnastics
and military
drill.

I came across gymnastics and military drill in one or two schools. But their necessity is not so apparent in the country as in the towns. As one teacher's wife remarked, her husband teaches these things, but they are really unnecessary, the children get sufficient exercise in tree climbing (it was a "forest" commune). Other teachers said they found the children had enough exercise in trudging to school and back without putting them through a lot of military drills. Most of the younger teachers hold gymnastic certificates. The term itself seems somewhat elastic. In some departmental programmes the *promenade scolaire* is ranked under the heading of gymnastics. The number of gymnasiums in France and Algeria actually decreased between 1892 and 1897 from 6,234 to 5,140, owing, no doubt, to the law which rendered teachers liable for all accidents on the spot. "*La crainte des responsabilités en cas d'accident paralyse le zèle de certains instituteurs pour ce genre d'exercice.*" (Official Statistics, page xlv.)

Singing.

Singing in nearly all the schools is learnt by ear. According to several witnesses, it is rather neglected (*lâché*) in the departments under observation. The musical parts of France are rather the east and the south.

(III.) SUBJECT GROUPS.

(a) *The Enseignement Ménager.*

The most important subjects of all, from the rural point of view, are the teaching of domestic economy in all its branches to girls, and instruction in scientific notions, especially those relating to agriculture, for boys.

Domestic economy in its large sense implies the education of the young girl in the manifold duties of the household. As Mdlle. Brès points out in her report to the International Congress on Primary Education which discussed this subject, it really embraces, over and above the looking after the home, the practical work of no less than five callings—the dressmaker, the sempstress, the washerwoman, the ironer, and the cook—not to mention the outdoor duties of the housewife in the garden and on the farm. Some even would add the hygiene and bringing up of children, no unimportant matter for a class in which every elder sister has more or less to play the nurse.

As a matter of fact, sewing is still classed in Sewing. French schools, as in English, as a separate subject, and as such may therefore be taken apart. One of the teachers I spoke to on the subject told me she devoted six hours a week to it, the ordinary programme allowing for about three. She managed to have this amount done by getting the girls to work out of hours, beginning directly after dinner. Her idea was to make the girls *bonnes ménagères*. At the girls' school at Mosnes I saw some interesting albums containing work done by each child and taken home by her to show her parents, with descriptions of the work on the opposite page. The use of these "huzzif" note-books, though not unknown in other schools, might be still more widely introduced into needlework classes. The time devoted to sewing in this school amounted to half an hour a week, but the pupils also worked at home.

In writing on the subject of domestic economy proper, Messrs. Bonaparte Wyse and Hughes-Dowling state that "it cannot be said that the training of girls in household occupations is yet very widespread in France. In the provinces very little beyond a book lesson once a week in domestic economy is given; in the town schools practical work hardly exists." At one school I visited I found the children receiving a lesson on the needs of keeping furniture clean, which was followed by a quasi-moral one on the duties of an elder sister. Both seemed practical enough. The worst lesson I ever heard was in a State school which was not yet laicised, the teacher gave a lecture on cooking a fowl, which it was painfully evident was taken from a book. This was followed by a set of questions, from which it was clear most of the children had only retained half the directions. It is to be hoped, for the

peace of mind of the future households they may have to preside over, they will quickly forget the other half. It is only fair to add that the inspector who was present was furious at this exposition of learning recipes by heart. Another mistress told me she concentrated her teaching on personal and household cleanliness. But nowhere did I come across anything like practical work either in laundry or cooking.

It is true that the standard of cooking in France is relatively high, and, as far as my experience goes, it is certainly above the average among the peasants. I have taken "pot-luck" at the simplest of wayside inns and even eaten at the board of some of the small cultivators. This appears after all only in keeping with their well-known thrift and economy which causes them to make use of everything. In fact, it did seem to me that the actual need of teaching cookery in country districts, where there exists no artisan population, is as yet non proven. The whole question, none the less, was considered of sufficient importance to be selected as one of the main topics at the International Congress. Thirty-three memoirs were sent into the organising committee, which were boiled down into a report of some twenty pages. A described analysis of the latter would, unfortunately, take up too much room, but space may be found for the conclusions of the Congress which have in this case, as in the others, been kindly communicated to me by M. Doliveux, Academy Inspector at Beauvais.

Resolutions
of the Inter-
national
Congress.

(1) The domestic education of girls is essentially the work of the mother of the family. It belongs none the less to the school in the same fashion as the needlework.

(2) Domestic teaching consists in the sum total of theoretical and practical knowledge indispensable to every mistress of a household. It comprises the purchase and preservation of food, the preparation of dishes, the art of setting a table, sewing, cutting out, laundry work, ironing, the keeping in good order of clothes and household furniture, the hygiene of the house and the art of making it beautiful, the hygiene of children, the nursing of the sick, and the education of early infancy.

The teaching of domestic economy and of the duties of a household ought to be obligatory for all grades of primary education, from the national school to the higher primary and professional schools, from the elementary primary school to the normal school for female teachers.

(3) At all the degrees of primary instruction, domestic instruction based on the general knowledge acquired will include essentially practical work.

(4) This education will be given by preference by female teachers prepared for that purpose. It is desirable that normal classes for domestic teaching be created in important centres.

(5) Questions in domestic economy should be set in the examination for the *certificat d'études*, the *brevet élémentaire*, the *brevet supérieur*, and the *professorat* for the *école normale*.

(6) The municipalities ought to be encouraged to establish complementary domestic classes, professional domestic schools, and cookery classes.

(7) It is desirable that post-scholastic classes and committees of patronage should find a place for classes, conferences, and the exercise of household duties and cooking in the continuation of the school work.

(8) Domestic education being necessary to the father of a family as it is to the mother, it ought to a limited extent figure in the programme of the primary schools for boys.

(9) The hygiene and education of early childhood ought to be one of the principal aims of an education in domestic economy in all grades, and the chief of the earliest objects of teaching at the school in its divers grades.

These resolutions seem to improve the town child's chance of getting practical instruction in the really important parts of the art of housekeeping, but it leaves the country child in the rural districts in very much a state of "as you were." Of course the word municipality is not limited to the sense of town council, and with us it means the ruling body in every commune. The present proposal makes no mention of asking for a definite subsidy from the state or the department. In this case it seems unlikely that the majority of parish councils will undertake the new charge of starting cookery or other classes. Perhaps the departments might see their way to create peripatetic teachers in domestic economy for each *arrondissement* as they have already done for agricultural teaching. These itinerant professors could start evening classes in various centres and help to organise classes in villages where outside help was forthcoming. They could also visit the schools and advise the teachers how to improve their existing methods for teaching this important subject, without, however, taking a direct part in the teaching. M. Strauss, one of the reporters of the Congress, expressed the French dislike for the peripatetic teachers in the schools by saying that the domestic economy should not come into the schools by the back staircase (*escalier de service*).

Conclusion.

CHAPTER V.—THE CURRICULUM (*continued*).

(III.) SUBJECT GROUPS (*continued*).

(b) Science and Agriculture.

The Englishman who comes to France to study agricultural education will probably discover after a week or two that not only the agricultural education he meets with is very different from what he expected to find, but that the rural problem itself is equally unlike that which exercises the minds of his countrymen. The three main points of difference are that France having more or

Radical difference in the problem between France and England.

less a rural population, while England has rather an urban, country interests have had far greater ease in making their claims not only heard but attended to. The French problem, therefore, has been tackled quite ten years earlier than the English. It is probably, on that account, less acute and less complicated. Secondly, England is rather the country of large farms; France is a land of small holdings. In the English village community the great bulk of the inhabitants are landless men, save the squire, parson, and farmer, whose children do not frequent the village school. In France, in some communes one person in every four is a proprietor, and therefore the pick of the village school are the sons of peasants who, from helping their fathers on their holdings from their earliest youth, are all more or less *au fait* with farm work. The sons of the landless men in England will most of them become in time labourers. The problem, then, in England is to give a hand and eye training; to raise the present low state of efficiency among the labourers, and render the present generation of children as skilful and handy as possible. Most of the sons of the French peasants will one day, owing to the law of divided inheritance, each have at least a strip of land of their own, if they do not purchase out of their savings a small plot on their own account. These peasant children, then, have no need to come to school to learn practical agriculture, and, as one authority says, would probably laugh at the master if he attempted to teach them, unless he sheltered himself behind some manual or other. This does not, however, imply ignorance of agriculture on the part of the majority of French teachers in rural districts. They are recruited (as we have seen) in great numbers from the peasant class, or from those who live in country districts, so that when they come into the rural schools they arrive already more or less equipped with a good working knowledge of the subject they are going to teach, and do not lose caste with a class of youngsters because "they cannot tell the difference between a swede and a turnip."

How the
French
have felt
their way.

The first serious effort made in France to create popular agricultural education goes back to the times of the Minister Duruy. In 1866 a special commission was named to prepare the necessary measures "for developing agricultural and horticultural knowledge in the normal schools, the communal schools, and the adult classes." The work of the commission met with but a cool reception, and then came the war. The question was taken up once more by the law of the 16th June, 1879, called the "law relating to departmental and communal teaching of agriculture." The tenth article declared:—

Three years after the complete organisation of the teaching of agriculture in the primary normal schools, elementary notions of agriculture shall be comprised among the obligatory subjects in primary education. Notwithstanding, in the departments in which the teaching of agriculture shall have been organised at the normal school for more than three years, the departmental council of public instruction can decree that the same instruction shall be obligatory in all the primary schools of the department. The programmes of this instruction in each department shall be drawn up according to the opinion of the departmental council of public instruction.]

The effect of this local option in programmes, which had its good side in making allowance for accommodating the programme to local needs, had unfortunately also the result of producing programmes of every sort and kind. Some, as M. Rene Leblanc has pointed out, were all for developing the professional side; others laid undue stress on the educative value. To judge by some of the older manuals, the favourite method was that of the stereotyped question and answer, in which the obvious was carefully defined in such statements as "the horse is a quadruped," with other details equally otiose. Nothing gives one a better idea of how long it takes for any new subject to settle down and assume its proper place and form than an interesting account on the state of agricultural education, written some ten years after the reform by a Russian colleague of mine on the Primary Jury, M. Kovalesky, who was sent by his Government to France to investigate the question. He travelled everywhere, visited the normal schools, to which reference will be made later, and looked over a good many primary schools. His first complaint was the lack of uniformity among the inspectors, due to a want of general inspection. Thus in the various schools he visited he found no less than six different conceptions of agricultural education! Two were merely theoretical. The first consisted of general scientific notions applied to agriculture, while an appropriate agricultural tinge was given to the curriculum by selecting passages for dictation out of the agricultural journals. The second was more ambitious. A definite course of agriculture was established, in which the work of the pupils consisted in learning by heart little agricultural catechisms. According to the third type, children were taken into the teacher's garden, and plants and methods were pointed out to them. The fourth type consisted in children having gardens of their own at home, in which, if they chose, they copied the teacher's experiments. According to the fifth method, children took part in the garden work under the direction of the teacher. And lastly there was the "allotment" system, according to which each child received a plot of his own and cultivated another in common with the teacher.

How little progress had been made in the matter at that date is shown by the fact there were in 1891 only twenty *champs d'expérience* for 80,000 schools. Examinations to encourage agricultural studies had already been started, but the questions were far too technical, and the cultivation of the school garden was generally neglected till near the advent of the prize season.

This groping in the dark and searching after right methods still went on for some years after M. Kovalesky's visit. As recently as 1897, in describing the actual state of affairs in Manche, the department contiguous to Calvados and Orne, the academy inspector touched on some of the weak spots of the then existing organisation:

In giving others instruction in anything, the first condition is to be master of the subject oneself. It is not enough to possess it in appearance, under the form of a book, the chapters of which the children are made to recite without explanation or comment. It is necessary to possess it in the form of assimilation.

lated knowledge. Now, in a number of schools teachers are still content to make the children read in common such or such small manual, which is only an agricultural catechism, as wearisome as it is useless, to resume its formulæ already enigmatic in themselves, and to learn them off by heart. The child has in his head the names of grasses he has never seen, of manures of whose composition and properties he is alike ignorant. He draws on the blackboard or in his copy-book all the parts of the plough, and he does not know why one ploughs or why one ploughs deep in one place and shallow in another. He distinguishes between the different sorts of grafts, and he is incapable of explaining to himself the mechanism of the operations. He who lives in the midst of animals and plants, who will have to breed animals and make plants to grow, does not catch hold of any connection between what he is made to learn at the school and what he sees and handles every day. There is a necessary link between the object and the lessons he learns by heart, but this link escapes him, because there is nothing given in the teaching of a nature to permit him to lay hold of it. He thereby arrives at the point of making fun of this agriculture by which one pretends to give him ideas.

The report concludes by advising the teacher to take up school walks, to encourage in the child his collecting hobbies, to form a school museum from the contributions of the pupils, and not to invest in a ready-made collection from Paris, and, above all, it reminds him he has not to teach the peasants cultivation—the peasants understand that far better than he—but the reason of the method of cultivation that the peasants follow instinctively, as “oxen that follow without thought the furrow.” The whole gist of the matter is that what is wanted is not agriculture, strictly speaking, but botany and zoology (and chemistry?) applied to agriculture with a view of explaining and improving its current practices.

The records of unsuccessful attempts, chemists are fond of telling us, are almost as valuable as those of successful experiments, as they save us from uselessly going over the same ground again and again. I therefore make no hesitation in giving copious extracts from instructions given by M. Pouillot, Academy Inspector of Cher, in 1896, to his teachers, as an admirable warning against wrong-headed methods, with clear hints of the proper manner of dealing with the question. He begins with discussing the necessity of rendering the teaching of science less abstract, less theoretical, and to direct its application towards agricultural teaching, which, as another inspector says, is a sort of logical outcome of the programme. He next discusses the failure of science teaching in the rural schools, and criticises the apparent and real causes. Among the causes of the first category he cites the complaint of some masters on the overgrown size of the programme and its lack of unity, the absence of teaching directions, the manysidedness of the subject, which embraces agriculture, horticulture, hygiene, and domestic economy, whence some educational papers call for the suppression of science and the teaching of agriculture pure and simple. The true reasons are that the teachers have not yet got a real grip of the programmes, they possess neither the letter nor the spirit, they do not sufficiently take into account the purpose of the teaching, and therefore its character, nor the age of the children, nor the abuse of manuals

often unsuitable. Yet science is one, and scientific teaching has its unity. If the programme of science is compared with that of hygiene, domestic economy, agriculture or horticulture, we can easily see that these forms of instruction, apparently isolated, gravitate, so to say, around the programme of science itself, which serves as their centre, and of which they are only developments or divers manifestations. In order to realise this unity, it is necessary to condense in a single series of regulated lessons the teaching of science, hygiene, domestic economy, agriculture, and horticulture, and specially adapt the official programmes to that effect. As guiding principles we shall (1) look on the programme of science as that which gives direction to the others. It is, in fact, the frame work. (2) We shall therefore only retain such scientific notions that apply directly to the usages of ordinary and country life. Application of each notion will go hand-in-hand with its teaching. (3) The reasons of methods of cultivation form another important principle. (4) The whole course will be directed mainly towards the teaching of elementary notions of agriculture or horticulture, but the agriculture will be such as the pupil will come across in his daily life, and therefore will not be high-flown, and, above all, it will be local, the lessons being given under the form of object lessons. The *rapport* winds up with specimen programmes illustrating these principles.

The programme in Cher was not the only programme that was drafted about this time. The Ministry had long had the matter under consideration, and in October and November, 1895, had already issued a couple of circulars foreshadowing the preparation of a scheme of school courses. This was followed on January 4th, 1897, by the celebrated scheme "on the teaching of elementary notions of agriculture in the rural schools," which is so widely and justly known. It is not reproduced here, as it has already been translated *in extenso* in the appendix to the Report of the Commission on Manual and Practical Instruction in Primary Schools under the Board of National Education in Ireland (C.—8925), 1898. It laid down that the method to be followed should be that of notions of science applied to agriculture, and rendered above all things practical. Its further aim is "to inspire" children "with a love of country life, that they may prefer it to that of towns and factories, and to convince them that agriculture, besides being the most independent of all means of livelihood, is also more remunerative than many other occupations to those who practise it with industry, intelligence and enlightenment." Then follow directions as to the time to be given to the subject, and the teachers are advised to give an agricultural tinge to the whole curriculum, and to arrange that the subjects in the curriculum correspond as much as possible to the seasons. Many departmental programmes have been marred by exaggeration. Suggestions for a revised programme follow. Only simple object-lessons should be given in the elementary course.

Reformed
programme
—The Cir-
cular of
January
4th, 1897.

For the middle course there should be more object-lessons, together with reading lessons and school walks. The pupils may be introduced to the three states of matter, with simple experiments, with talks on animals and man, during the first half year. During the second half, or summer season, the main subject is plants and their germination, with the division between useful and noxious plants. During the second year of the middle course will come the study of combustion and the composition of soils, the latter to be studied during the school walks, followed by lessons on plant life by means of horticulture, demonstrating the use of manures. In the higher course, which is rarely organised in rural schools, the teaching will treat of the hygiene of animals and man with a little vegetable physiology and the chemistry which deals with manures, to be succeeded by the famous fivefold experiment in which the actions of chemical and natural manures are studied and compared,* not forgetting the well-known experiment with liquid manure, which is very much to the point, as it is computed that no less than £20,000,000 a year is lost in France through the peasants neglecting to utilise their *purin*. The *cours* concludes with directions for the *champs d'expérience* and the school walks, with hints to help the children to observe the principal agricultural operations. This is, of course, only the barest of *résumés* of a document which should be perused from end to end. A further amplification of the scheme is to be found in the handbook on Agricultural Education, by M. René Leblanc, Inspector General, who is really the parent of the new movement for rational agricultural teaching.

Programme
of Indre-
et-Loire.

Among the programmes readapted in the last three years, one of the most interesting is that of Indre-et-Loire. Allusion has already been made to the fact that it had been entirely put together by the united efforts of the academy inspector, the primary inspector, and the teachers. Nor is this the only instance of the value of teachers' conferences in the putting together of new programmes. In 1895 the school authorities in Loire made use of the same machinery to revise the programmes for that department. In connection with this it is worth noticing that the syllabus in any subject is supposed to be in keeping with the regulations that govern all France, so that it is apparently necessary in such a subject as agriculture to draw up a maximum programme, that is to say, one that includes all forms of cultivation, no matter whether the department be a wine or cider country, pastoral or arable, it being left to the individual teacher to pass lightly over or ignore those facts which do not apply to the husbandry of his district. *Après* of this, one teacher made to me the curious remark that a minimum programme would seem to cast a slur on the teacher, as implying a wish to limit his teaching. On looking

*The five pots contain: (1) the standard without manure; (2) a complete dose of manures; the third received nitrate and potash; the fourth superphosphate and potash; and the fifth nitrate and superphosphate.

at the Indre-et-Loire programme, the first thing that catches the eye is that it is varied according to whether it is intended for town or country children; that for the town bears as heading "Physics and Natural Science as applied to Industry and Hygiene," while that for the country is entitled "Physics and Natural Science, applied to Agriculture, Horticulture, and Hygiene." The same subject for girls in the towns is described "as applied to industry, hygiene and domestic economy," while that for the country girls applies to agriculture, horticulture, hygiene, and domestic economy. Here then are two points that it is worth bearing in mind, to which later on reference will be made, differentiation between town and country schools as regards programme, and the recognition of the need for training girls in agriculture and horticulture.

For the present, confining ourselves to boys in the country we find that while the old programme began with the fall of bodies, the balance and all the aridities of mechanics, the new is practical throughout, and follows the seasons. It is also the same for the three *cours*. It began with such common things as the air, its composition, oxygen, nitrogen, carbonic acid, mist, miasma, dust, movements of the air, winds, weathercocks, effects of the wind, windmills, æolian harps. The headings of the lessons for the year are as follows, some of the agricultural applications being given in brackets:—

The Air. Oxygen (nitrogen, rôle of nitrogen in agriculture); fresh and foul air (ventilation of stables, cowsheds, etc.); action of air on plants (ventilation of the soil). Water (use of rain or snow). Drinking water. Rôle of water in agriculture (action of water on the roots, stalk, and seeds). Drainage (consequence of drainage). Rôle of water in agriculture (irrigation). Farm work (various forms of). Ploughing instruments: Harrows, rolls, carts, tumbrels. Coal: heating, lighting. Carbonic acid (carbon of chalk, its rôle in vegetable life). Fermented drinks (vintage, maladies of the vine, dangers of alcohol, etc.). Fermented drinks (continued) (apple harvest, cider, perry, beer, vinegar, alcohol). Alcohol (distillation). Sulphur. Chlorine. Potassium, soda, salt (application in agriculture). Metals. Rocks. (chalk, improvements of the soil). Gypsum (use in agriculture). Clay. The soil and subsoil. Improvement of arable land. Manures. The farm. Weight. Weight of air. Weight of liquids. Heat. Electricity. Atmospheric electricity—magnets. Sound, light (necessary to vegetation, influence of light on the crops). Man. Food. Man (continued). Animals. Mammals. The farm animals (six lessons). Birds (three lessons). Poultry. Reptiles. Fishes. Invertebrates. Insects (noxious, noxious to the vine). Useful Insects. Molluscs and zoophytes. Plants (two lessons). Tree culture. Fruit trees, pruning. The vine (two lessons). Charcoal. Plants (five lessons). Plants (beetroot, carrots, turnips, etc.). Textile plants (hemp). Other textiles (cotton, wool). Paper. Oleaginous plants (colza, etc.). Dye plants. The flower, the fruit, and the

seed. The Fruits. Cereals (two lessons). The Harvest. Bread. Germination, sowing, rotation of crops. The Garden (six lessons). Medicinal Plants (two lessons). Noxious Plants. Poisonous Plants. Classification of Vegetables (two lessons). Plants without flower. Diseases of the Vine. The Agricultural Wealth of Indre-et-Loire. Three lessons on agricultural book-keeping.

Of Sarthe.

Through the kindness of M. Cassarini, the agricultural professor in Sarthe, I have been able to procure a copy of the new programme for the new primary schools of the department, which has been drawn up by M. Cassarini after the indications of a special committee formed of the inspectors and heads of the normal schools under the presidency of the inspector of the academy, assisted by the two agricultural professors of *arrondissements*, and the president and secretary of the Agricultural Society of Sarthe—an almost ideal combination, made up of seven educationists on the one hand and five persons skilled in agriculture on the other. This programme is not concentric like the last, but is arranged for two years. Each year allows for seventy-five lessons, and includes a revision lesson at the end of each month, and seven at the end of the school year. The programme is more frankly agricultural than the last. The following are the test lessons for the two years, which are divided up roughly into two parts, the first year being devoted to the farm and the crop, and the second to the live stock. The first year only is given (a translation for one year, with the analysis of each lesson would be about 15 to 20 times the length of the following *résumé*).

Definition and Aim of Agriculture.—Agriology, or the study of the soil. Physical study of soils. Chemical study of soils. Atmosphere, its composition. Meteorological phenomena, water, light. Revision. Improvement of soils. Manures, definition, classification. Farm manure. Manure of animal origin. Manure of vegetable origin. Mineral and chemical manures. Phosphates. Potash. Revision. Sulphate of iron, sea salt, sulphate of copper. *Champs d'expérience et de démonstration.* Fraud in the sale of artificial manure. Irrigation, drainage. Farming operations. Ploughing, etc. Plant study, germination, nutrition of the plant. Review of vegetable products. Choice and improvement of cultivated plants. Revision. Special crops, cereals, wheat, barley, etc., Winnowing machines. Artificial grass (Lucerne, etc.). Vetches, etc. Green crops. Ensilage. Natural pastures, permanent or temporary. Revision. Root crops. (beetroot, etc.). Potatoes. Hemp. Agricultural industries of the region. Rotation of crops. Culture of the vine or apple trees, or both, if they both exist in village. Pear tree, perry. Fermentation of wine, cider, and brandy. Principal forest trees in the country. Revision. The kitchen garden, the work in it, making beds. Study of several kinds of vegetables. vegetables cultivated for their leaves, for their bulbs, for their roots, for their seeds. Other productions of the garden. Artichokes and asparagus. The strawberry plant. Revision. Fruit culture

by sowing and budding, by grafting. Forms given to trees, espaliers, etc. The classification of trees. The vine for table grapes. The peach tree. The plum tree. The cherry tree. The pear for the table. The apple tree. Ornamental plants. Medicinal plants. Revision. Seven final revision lessons.

The above "programme" appears to err on the side of attempting to be too thorough, and the agricultural professor himself told me it would probably have to be cut down. In fact, it was to be looked on as "under revision." The chief difference between this and the preceding programme is that it goes in directly for teaching agriculture, while the other only teaches it incidentally. Not that it neglects the scientific side, as it bears at the top the following direction: "The teacher arranges for the agricultural lessons to be preceded by science lessons bearing on them. He accompanies them with experiments and object lessons." The Sarthe programme is the more systematic as far as agriculture is concerned, but a child brought up on the other programme would probably possess more general knowledge.

In Calvados the programme is again different. Agriculture Calvados. is taught in conjunction with hygiene and domestic economy, and the programme is, in fact, "general," as in Indre-et-Loire. It differs again from the latter by being divided into two parts, one for the *cours élémentaire* and the *cours préparatoire*, and the other common to the *cours moyen* and *cours supérieur*, whereas, it will be remembered, the Indre-et-Loire programme was *concentric*. The latter, again, was divided into town and country, while the former is for the whole department. All this is only another admirable instance of the decentralising influence of the departmental form of government. The first part of the programme is resumed under the following heads.

To build one's house (materials and workmen employed, etc.). *To give one light* (candles, lamps, etc.). *To give one warmth* (snow, cold, wood, coal, etc.). *To clothe oneself*. *To feed oneself*. *The human body*. *The domestic animals*. *Birds in general*. *A country walk* (the plants, etc.). *A walk round the farm*. *Water, the sea*. *Work on the farm*. *Stray notions* (storms, paper, books, etc.). This is evidently nothing but a compact little programme of object-lessons for the little ones, on common things. (The actual programme is about ten times as long.)

The scheme of work for the first three months will give a very fair notion of the "cast" of the second part of the programme.

September-October.—The three kingdoms in nature. The three states of bodies. The air, its composition. Oxygen. Pure and foul air. The atmosphere. Atmospheric pressure. Simple experiments which illustrate it. The barometer. Pumps. The siphon. Ballons. Water and hydrogen. Uses of water. Drinking and contaminated water. Changes in the state of water. Applications of these principles.

November.—Heat: Its effects. Evaporation. Boiling. Expansion. The thermometer. Conductivity. Utilisation of heat.

Radiation. Bell glasses. Glass frames. Light, its effects. Lighting and health. Carbon. Natural carbons: diamonds, coal, anthracite, turf. Artificial carbon. Charcoal, etc. Carbonic acid. Quick combustion. Slow Combustion. Heating: diverse methods and apparatus for heating. Their advantages and their inconveniences. Burns. Asphyxia.

Here the programme is more frankly scientific, and the agriculture which is duly introduced in the succeeding months is not so closely connected with the scientific portion as in the others, the science being roughly given in the first half of the course, and the agriculture in the second, instead of the teaching being *pari passu* as in the Sarthe programme.

Horticulture
and agricul-
ture for girls.

In all three departments there is either a programme for agricultural education for girls, or one is being prepared. The notion of agriculture for girls may make some critics smile, despite Lady Warwick's interesting experiments, but the point of the teaching is to instruct girls in certain notions connected with milk, butter-making, poultry, and gardening. (A whole month is devoted to the latter in Indre-et-Loire.) In Calvados the girls follow the same course as the boys in the *cours préparatoire* and *élémentaire*. In the higher portion of the programme a certain amount of science is left out, and replaced by notions on hygiene and domestic economy. In a mixed school, when the lesson is not common to both sexes, a science composition is given to those "who are sitting out." By the mere force of circumstances the wife of the French peasant naturally requires to be *au fait* with farm work when the entire holding is only an acre or two. Besides, the garden itself is specially regarded as her province. The celebrated Mathieu de Dombasle used to say: "Je ne connais qu'un moyen pour la culture économique d'un jardin dans une ferme, c'est que la fermière entreprenne elle-même la direction?" Many peasants, apparently, hold this view, for they look down on horticulture as women's work, and only labour in their gardens when they have nothing else to do. The rôle of women in farm life is well described by M. Mondiet, academy inspector of Landes, in a circular issued in 1889. "Are not," he asks, "agricultural notions indispensable to all who live in the country? Have not women a large share in the work on the farm? and does not everyone know how the domestic economy of the woman plays a large part in the success of farming operations?" Girls, then, he adds, "will concentrate their studies on these points: keeping up and cultivation of the school garden, flower cultivation, preservation and sale of fruit, feeding of animals, the attention they require, and kindness towards them, products of domestic animals, dairies, poultry, etc.; the function of artificial manures and preparation of manure; noxious plants, useful and harmful insects, services rendered to agriculture by the birds."

Criticism on
the pro-
gramme.

To sum up so far. The main object of these programmes seems to be threefold: (1) To give the children an insight into the reasons

underlying agricultural operations, in order to induce them later on to follow less blindly the routine which is still too much the rule with the French peasant. (2) To cultivate at the same time the knack of outward observation by means of experiments and object lessons. (3) To form housewives having the spirit of order and economy (programme of Calvados). (4) To increase in children the love for the country, and for a country life. M. Deries, academy inspector of Manche, has well said in his report of 1897, already alluded to: "The agricultural spirit is at first the love of the rustic life, in its labours at once rude and soothing. It is next the science of the soil, of the plant, the animal." While the primary inspector of Clermont Ferrand says: "The best way to make a workman love his work is to make him to understand it." Thus we have cultivation of the judgment, intelligence and observation, with training of the eye, but with one exception we shall see there is no manual training, and anyone who knows the problem in France will see that, though necessary, it is not so essential as in England.

Should manuals be used at all, at least by the pupils? With the note-book system, so in vogue in Germany, the teacher plays the part of the parent stork by carefully digesting the lesson in a dictation which is as carefully got up by heart by the pupil, but if the latter has any of that appetite that comes with eating, he can get no more, for he has nowhere to go to. Another grave disadvantage in the abolition of text-books is that the pupil, when he leaves school, does not know how to find his way about a book; having been fed exclusively on the peptonised food prepared by the teacher, he is unable to digest a subject served up in book form. Again, a manual acts as a kind of grammar, or book of reference, in which everything that has been learnt in a haphazard and isolated fashion finds itself reduced to a certain logical order, which tends to reproduce itself on the minds of those who use the book, and helps them thus to store their knowledge in an orderly fashion. Even if the knowledge acquired is not sufficiently comprehensive to be made into a regular system, the manual will still be very useful as a book of reference, if not of preparation, as two teachers of Die, in a *rapport* published in 1897, assert. The contrary evils to which the employment of regular text-books sometimes leads, have already been sufficiently indicated by the frequent allusions to the abuse of manuals. There is, however, a golden mean between the two, and the exact rôle of books in the matter is very happily defined in the Calvados programme.

Books will be useless in the *cours élémentaire préparatoire*; optional though advantageous, in the *cours moyen*; indispensable in the *cours supérieur*. The work placed in the hands of the pupils will only serve for reference (*memento*). In no case will it take the place of oral teaching.

Coming, then, to the text-books themselves, we find two specially popular, one by M. René Leblanc and the other by M. Barillot. Some teachers asserted that the first-named was too scientific for the lower classes, but they all agreed

it was an indispensable book of reference for the teachers. Barillot was a general favourite, though sundry critics thought the book did not go far enough, and others complained it was too exclusively agricultural. At any rate, it is appreciated by the parents, as I heard in two instances at least of parents having read the book with pleasure when brought home by their children. A local publication I came across was described as too scientific and possessing the fatal drawback of separating the theoretical part from its application. A very interesting volume was a manual by M. Lagrue, primary inspector at Bayeux, called "Summary of Science, Hygiene, and Agriculture of the Bessin," as the Bayeux district is called. Here, instead of writing a book which takes in all France, the author confines his agricultural applications of science to the particular husbandry of his own district, and draws all his illustrations from the condition of things in his own *arrondissement*—one of the best ways I have seen of bringing home to children the practical nature of the subject.

ictures and
agrams,
c.

Pictures of the diseases of the vine, and diagrams illustrating the advantage of using *engrais*, were to be seen in some schools, and the use of these might with advantage be multiplied. In one school I also saw an agronomic map of the commune, drawn by the teacher, and mention has already been made of the maps of the department giving the principal *cultures* according to the localities. The *musée scolaire* (see page 72) is useful for keeping specimens of the various chemicals which enter into agricultural science. It is still more useful when it contains, as at Chaumont (Loir-et-Cher), extracts of starch or salt made by the pupils themselves.

The Experimental Side.

) Pot
ulture.

I came across a certain number of teachers who practised the experiments in pots. Some were satisfied with the results. Others had not been so successful. Sometimes the earth of the *témoin* turned out to possess latent agricultural virtues, and the plants without manure did as well as those with, an excellent proof that in manures, as in most things, enough is as good as a feast, but scarcely the result desired. At other times the effect of the weather ruined the experiments. Some teachers, I was told, neutralise these untoward effects by changing the tickets, but that is not playing fair.

) Teachers'
ardens.

In this matter the procedure of the teachers varies considerably. Some keep their gardens to themselves. Others, like the teacher at Carpiquet (Calvados), take the children into the garden and allow them to watch the digging and planting. Another teacher informed me he did not make his pupils work in his garden because of the *mauvaises langues*. Mention has already been made of the teacher who instead of setting his pupils lines made them set cabbages. The master at Chauffour allows the children to plant but not to dig. They take great interest in what he does and help him to hunt out and keep down the

noxious insects. The teacher at La Chaussée-Saint-Victor does still better. He organises a campaign against cockchafer, which are a terrible pest in his village, and the children are paid two sous a kilo for those they collect. The teacher at St. Avenin told me he took the children into the garden to give them practical lessons. When in the garden he pointed out to me a dying pear tree, which was withering because it had reached the rock in the subsoil below, and said it would come on as a lesson in a week or two. A very good idea! Some teachers also perform in their gardens instead of in pots the "fivefold experiment" with or without manures. It is not always successful. Sometimes the earth in the *témoin* plot, as in the pots, is not sufficiently sterile. The weather, too, is an uncertain factor, and, finally, the sparrows not infrequently eat up the seeds. Most school gardens are next to the school, but in one case the teacher's garden was at some distance away, a fact which, he said, prevented him from making experiments.

The two most necessary improvements in French rural economy (c) Grafting. to-day are a more extensive use of natural and artificial manure and the reconstitution of the vine. After the advent of the phylloxera, and the various attempts more or less ineffectual made to combat it, the ruined peasants gave up the struggle in great numbers. Then followed the introduction of the American vines, the great majority of which are not immune, as some people think, but hardy enough to thrive all the same though attacked by the disease. Still, this did not solve the problem. It was soon noticed that by the substitution of American for French vines, the choice vintages which had been the produce of vines cultivated for centuries on the same spot were entirely lost. Happily, the phylloxera only attacks the roots of the plants. A systematic grafting was therefore the obvious remedy. Unluckily, the French method of grafting is comparatively uncertain in its effects. But with the introduction of the English method excellent results have been obtained, and the vines of France, at least, in the districts I visited, are everywhere being successfully reconstituted. This, of course, is largely due to the efforts of the departmental professor of agriculture. He has, however, been ably seconded by the teachers. In Sarthe, those who have taken up grafting are comparatively numerous, as well as in Indre-et-Loire and Loir-et-Cher. Many, in fact, have made themselves duly qualified grafters, although the examination is no easy one. The headmaster at Mayet told me when he passed he was one of only seventeen out of a total list of seventy candidates. He also showed me a bed of grafts he had made with the aid of the pupils. The children, being mostly the sons of peasants, take very readily to this form of instruction, and become very expert. They practise in their own gardens, and, as their sight is sharper, they are sometimes even more successful than their parents. Nor is this grafting confined to the vine alone. The teacher at Trun, in Orne, told me he taught the children grafting on apple-trees, and at La Chaussée Saint-Victor the teacher showed

me some flourishing pear-trees grafted by the pupils. I also came across a teacher who taught his children pruning, and doubtless there are many more.

d) Champs
d'expérience
et de démon-
stration.

Of the *champ d'expérience*, technically speaking, there are no examples in rural schools. It is really a field for scientific research. The so-called ordinary *champ d'expérience* ought in strict parlance to be called a *champ de démonstration*, as it is really a method of showing results already ascertained. Still, the term is so commonly misapplied that it has practically become a synonym for the other. The number of these *champs de démonstration* varied greatly in the departments I visited, and were by no means all under the control or even supervision of the primary teacher. They are sometimes lent by a peasant, sometimes hired by the commune, sometimes they take place in the teacher's garden. In Calvados out of 763 communes there are between twenty and thirty, of which probably not more than ten are supervised by the teachers. A teacher who looks after one of these *champs d'expérience* told me it was cultivated by the proprietor. He himself merely supervised it, and took his boys there occasionally to study and note the effects. In the case of another "trial field," about 10 kilometres away, the commune had provided the *engrais* and the proprietor lent the field. In Orne, with 512 communes, the Professor of Agriculture told me there are about sixty *champs d'expérience*, about twenty of which are looked after by the teachers. I visited one of these at Lonray with the schoolmaster. The peasant who owned the field went with us. As in other *champs d'expérience*, the effect of the artificial manure was clearly visible. What seemed to me still more important was to find the teacher on such good terms with the *farnier*. The director in the practising school at Alençon told me he had a *champ d'expérience* last year. The ordinary crop of the district is about fourteen hectolitres the hectare, or about sixteen bushels an acre; his plot produced twenty-six hectolitres, or nearly twenty-nine bushels an acre. His pupils not only sowed but cultivated the plot, and gave it a dressing of artificial manure. At Trun, again, there was a *champ d'expérience* of $2\frac{1}{2}$ acres, in which experiments were being made with three sorts of manures. The field itself was lent by a private individual, the artificial and the seed being given by the department, the crop going to the proprietor. The parents, I was told, take much interest in the experiment. Sarthe is one of the most advanced departments in agricultural education in some ways. It has 386 communes, and possessed over 150 *champs de démonstration*. These included experiments in crops of all sorts and kinds, including *méteil* (a mixture of rye and wheat, of which the farmer makes his bread), and *melarde* (a mixture of barley and oats, with which they feed their cattle). At Mayet I visited two *champs d'expérience* looked after by the teacher. The first was a patch of oats, which showed very visibly the effect of the various *engrais*, and compared most flatteringly with other patches of oats in the

vicinity. This particular *champ* was hired by the teacher and sown by labourers he employed, the money being found by the departmental professor of agriculture. The second field belonged to a cultivator, and was also a piece of oats. The effects of manure were very marked, especially where the *purin*, or liquid manure, had been put on. We met the cultivator himself, who seemed highly satisfied with the experiment. The teacher also showed me some experiments he was making on a vineyard near with a view of combatting the phylloxera. In Indre-et-Loire the *champs d'expérience* are not so numerous. But one of the inspectors informed me a strong effort was going to be made to increase them. In Loir-et-Cher the departmental professor of agriculture was away at Paris, but judging by the fine laboratory at his disposition the department ought to be one of the most active as far as agricultural education is concerned. I visited a small *champ d'expérience* of $2\frac{1}{2}$ ares at St. Denis-la-Victoire, which was hired by the commune, and the "artificial" was given by a Paris firm to introduce their wares to the neighbourhood. The oats and barley both showed the effects of the treatment, but it was impossible to pronounce on the beetroot and haricot beans, as they were only just coming up.

The following extracts are from a MS. copy of the account of *champs d'expérience* and *de démonstration* in Sarthe during the season 1898-9, compiled by the departmental professor, M. Cassarini, and kindly copied for me through his permission. They will give some notion of the magnitude of the work, and also the extent to which the teachers share in it. 167 *champs* were created, thanks to the efforts of no less than 26 agricultural associations, and a certain number of teachers who were responsible for 50 of them, each being about quarter of an acre in size. The other parcels of ground measured on the average three-quarters of an acre apiece. The total area amounted to about 111 acres, not counting in the standard plots, which came to nearly the same superficies; the *témoins* represented in this case the ordinary methods of cultivation of the locality in which the trial plot was situated. Most of the trial fields were established to demonstrate the value of certain manures, or the choice of seeds. The experimental fields were devoted to a trial of a few new varieties of wheat, oats, and potatoes; experiments in the effect of manures were made in the schools. The demonstrations were made for the most part among the more progressive farmers. The results were very satisfactory, despite the bad season. Economic statistics are given to show that the use of well chosen manures is really a saving of money, being more than compensated for by the improvement in the crops, while the unexhausted improvement to the land must also be taken into account. This economic aspect is the gist of the whole matter. The comparative "yield" is no guide unless the comparative cost is considered. Details on successful experiments in comparative manures

follow. Mention is made of the economies realised by cultivators who have bought the raw materials for artificial manures, and mixed them under the direction of the departmental professor. Finally, the latter regrets that only a quarter of the farmers profit by these experiments and take the professor's advice. Time, more of these object-lessons, the spread of education, the disappearance of the older generation, with the new generation, who are less "untoward," to take its place, are all factors in the ultimate success of the new agriculture.

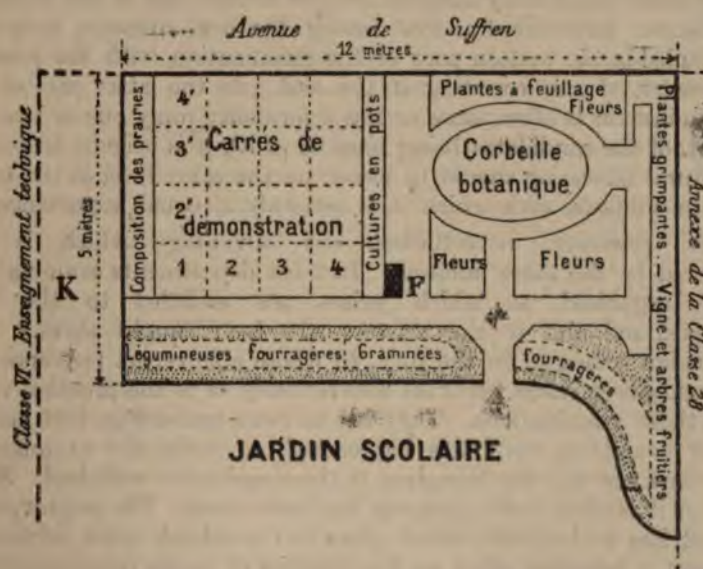
*Promenade
scolaire.*

I came across several teachers who, apart from taking their pupils to visit the *champs d'expérience*, also made excursions with them, according to the instruction of 4th January, 1897. The children are often armed with note-books, the rough notes of which are furnished either by the teacher's explanations or their own reflections, and serve afterwards for an essay or an oral narration of the walk. Another good way of utilising these outings is that of the headmaster of St. Aubin's (Calvados), who encourages his pupils to form a botanical garden by collecting new plants during these excursions. The garden is divided into plots reserved for the principal families, and each new acquisition is planted in the bed reserved for the genus. This helps to impress the family on the pupil's mind.

*General
impression.*

Some of the older teachers are somewhat indifferent. They look on the subject rather as a new fad, though there are exceptions. I came across one veteran at La Chaussée-Saint-Victor, who had been an enthusiastic pioneer in the movement from the start. A certain number of teachers, I was told by one eminent authority, are rather lukewarm. They have gone into education because they detested agriculture. Such recruits are not very likely, therefore, to make the best of teachers in the matter. Again, there are districts where the movement has barely caught on at all. An inspector with a very big district told me he had about five teachers who seriously took up the matter, the rest confined themselves to class teaching. Some of the teaching, therefore, is too bookish, and it can scarcely be otherwise where the teacher makes no effort to render it real, either by experiments in his garden or in pots, or by forming at least a proper school museum. And here again I find my opinion supported by that of an inspector, who said he had no high opinion of the theoretical teaching as given in most of the schools. *Per contra*, the best teachers not only seem to be trying to make their teaching practical, but also to attach it to the local agriculture, of whatever nature it may be, insisting in the grass countries rather on questions of cattle and cattle-feeding; in the arable districts on cereals; in the vine regions, on the treatment of the vine. At the same time, they encourage the children to form botanical collections, help them to discriminate between the birds and insects useful to agriculture, and its enemies; take them for interesting excursions, and make them record their impressions, and kindle in them thereby not

only an interest in but a love of the country-side. The outlines of this teaching, if it is to be successful, have been very clearly laid down. It should be scientific, for it deals with "the science of the soil, of the plant, of the animal" (academy inspector of Manche 1897), and it must be practical, and to ensure this every school should have its own *champ d'expérience*. The head of one of the higher primary schools told me he had no very great belief in the *enseignement agricole* unless the teacher had a *champ d'expérience*. ^{Need of} *champs* *d'expérience* ^{everywhere.} A very bright teacher at Chaumont confessed he felt he really could not do much without a *champ d'expérience*, and meant to ask the village council for one next year. And, again, the primary inspector of Vendôme looked on the multiplication of *champs d'expérience* as the one thing needful. This view is also strongly held by the *administration* at the present time, and M. René Leblanc, who is already ready to practise what he preaches, established in a small corner of the Exhibition a model school garden, which only covered about 74 square yards, or a little over two rods, an area which it should not be beyond the means of the smallest commune to provide. † The garden itself (see plan below) represents exactly the *mise en scène* of the principal demonstrations suggested in the celebrated circular of January 4th, 1898.*



1. Maize. 2. Tomatoes. 3. Potatoes. 4. Leeks, spinach, strawberries, all without manure. 2¹. Some strips with manure without phosphoric acid. 3¹. Id., without nitrate. 4¹. Same culture, with complete manure. F. Fountain. K. Meteorological kiosk.

* So runs the official account in the "Revue Pédagogique," from which the extract which follows is taken.

The *jardin*
modèle at
the Exhibi-
tion.

"Many of the plants were sent direct from school gardens. The botanical bed in the middle is composed of field flowers. It suffices for the study of the characteristics of the principal families, and is none the worse for being ornamental. In the foreground of the garden is a narrow bed containing the principal leguminous and gramineous plants that every cultivator ought to know. To the left five little squares of a mètre each have been sown with a suitable mixture of these leguminous and gramineous plants, in order to form specimen meadow plots. In a quadrangular plot of four mètres square, whose soil is practically sterile, four distinct strips have been prepared for demonstrative culture. The first is the standard with no manure; the last has received a complete dressing of manure. In the two others one fertilizing element is wanting: nitrate is lacking in one and phosphoric acid in the other. The plants in each are identical, and include maize, tomatoes, potatoes, and in the last square, leeks, spinach, and strawberries. Against the wall at the side are climbing plants, vines, and fruit-trees." In spite of the torrid heat and the persistent attentions of the Paris sparrows, the garden looked remarkably well, and the experiments were most satisfactory.

Need of
sanction.

Finally, if the teaching is to have the full importance attached to it that it deserves, it must be placed on the same footing as the other compulsory subjects for the written part of the *certificat d'études*. Introduced at first among the oral subjects, it is now included in the written part of the examination, with the proviso, however, of only counting at the oral. As the latter part of the examination is often more or less a formality (only one or two per cent. of the candidates being plucked at it), it is evident that agricultural education should be placed on the same level as the other main subjects, with which it is certainly of equal importance.

The extra
prizes.

It possesses, nevertheless, one advantage which is not shared by the other subjects. In most departments examinations are organised, at which prizes are awarded to the best pupils, and also to the masters who have taught them.* My Russian colleague on the jury, to whose able report reference has already been made, reported unfavourably as to the practical value of those examinations. They led to mere cramming, and neither the examining staff was big enough to make the examination serious, nor was the time given to the examination sufficient. Since then it is plain much progress has been made. The improvement that has undoubtedly taken place in the schools must necessarily assert a beneficial effect on the qualities of pupils presented at the examinations, though I happened upon one or two persons who were still sceptical of their efficacy.

* These are awarded partly on the performance of the pupils and partly on essays sent in by the teachers on some agricultural subject. To give the smaller schools a chance of competing, the schools in Sarthe are divided into three classes—(1) higher primary, (2) schools with three departments, and (3) schools with one or two departments.

The examination is in two parts. First there is a composition on some written subject (with perhaps other questions appended) common to all the schools examined, and then a sort of roving commission go round the schools and examine the children. For the following specimen papers I have to thank M. Javary, inspector at Tours. The method employed in the first part of these papers is familiar to the British public from the missing word competitions.

Year 1900.

Schools of
Cours.

SCHOOL AGRICULTURAL COMPETITION.

(GIRLS.)

KNOWLEDGE OF COMMON THINGS.

(Read attentively each question and insert in the dotted space the proper word.)

1. The air of the atmosphere is principally composed of two gases, which are:—1st,; 2nd,
2. The one of these two gases which supports combustion and respiration is called
3. Water appears in three different states according to its temperature; these three states are: the state; the state; the state.
4. Water is not always drinkable; in order that it may be so it is necessary to it or to it.
5. Defective heating apparatus can cause asphyxia in allowing to escape into the room two dangerous gases, one called and the other
6. The four principal fermented drinks are
7. All fermented drinks contain a dangerous element called
8. Phosphorus enters into the composition of and into the composition of chemical manures called
9. The best clothes in summer and in winter are made of stuff.
10. To get rid of insects and molluses, injurious to cultivation, it is necessary to introduce into gardens and
11. The complete flower is composed of four principal parts, which are: 1st, the (masculine), composed of; 2nd, the (feminine), composed of; 3rd, the (plural); 4th, the (masculine), composed of
12. Bees are housed in which contain a number of insects, which amount from to and contain each a and and
13. The finest wools are derived from sheep; the sum total of the wool covering these sheep is called

Questions of Domestic Economy.

(Answer each question in the space left in blank—space given, from two to three lines.)

1. Why must one air rooms? 2. Why should one not allow plants to be left in the room? 3. What precautions are to be taken in cleaning and preparing petroleum and spirit lamps? 4. What is the use of ashes in washing? 5. What precautions are to be taken during a thunderstorm in the house or in the fields?

6. What is the first aid to be given to a person who has been bitten by a viper? 7. In a case of poisoning what is the first aid to be given to the patient while awaiting the doctor's arrival? 8. Bread-making, the use of yeast.

Drawing (space given, half a page).

Design an apron. You will lightly indicate with a dotted line the hem, the belt, and the pockets.

Book-keeping.

A farmer's wife goes to the market. She sells 5 chickens at 3 fr. 75 cent. a piece, 6 kilos of butter at 2 fr. 10 cent. the half kilo, 3 dozen eggs at 90 cent. a dozen. She buys 3 metres of calico at 55 cent. a metre, 1 kilo 250 gr. of coffee at 5 fr. 50 cent. the kilo, and spends 2 fr. 40 cent. on small purchases. Make out her account for receipts and expenditure, and indicate the sum brought forward.

Short Essay (about half a page).

1. Butter: its making and preservation—salt butter, melted butter. 2. The Silkworm: its metamorphoses; products obtained from it.

SCHOOL AGRICULTURAL COMPETITION.

Year 1900

(BOYS.)

Schools of
Tours.

KNOWLEDGE OF COMMON THINGS.

(Read attentively each question, and insert in the dotted space the proper word.)

1. Plants derive from the air a gas, acid, which they decompose by means of their, thanks to the light of the

2. Fermented liquors (name four:) are (useful or injurious) when taken in moderation; distilled liquors, such as are always injurious.

3. Sulphur, whose colour is, is employed in manufacture for and in agriculture to combat a disease of the vine called

4. Limestone is distinguishable from flint by the fact that limestone makes with; the effervescence is caused by the liberation of a gas called acid.

5. Limestone is a carbonate of while plaster is a of lime.

6. Lime is derived from a mineral called which is burnt during several days in . . . apparatus called

7. To increase the yield of artificial pastures one scatters on them dust.

8. Atmospheric pressure is measured by the aid of instruments called and temperature by the aid of instruments called

9. In our districts when the barometer falls, it is a sign of

10. Name two insectivorous mammals, the and the

11. The mammals most useful to man are: the and the; they belong to the order of the

12. Name an insect injurious to the vine? and one injurious to the corn?

13. Give the names of the male, the female, and the young of the following races of animals:—

Horses: 1st; 2nd; 3rd

Cattle: 1st; 2nd; 3rd

Sheep: 1st; 2nd; 3rd

Goats: 1st; 2nd; 3rd

Pigs: 1st; 2nd; 3rd

Short Agricultural Questions.

Reply briefly to each question in the space left blank (two or three lines generally left for each answer).

1. How can one put out a chimney on fire? 2. What precautions should be taken in a thunderstorm? 3. What do you call a bird of prey? How do you class them? Are they useful or injurious?
4. Among the batrachians one must respect the ugliest; the Why? 5. What are the functions of the roots of plants?
6. What is a pasture? How many sorts of pastures are there?
7. Name two plants which enter into the composition of natural pastures, and two others which enter into the composition of artificial pastures. 8. How do you manufacture spirits of wine, eau de vie, and cider brandy.

Drawing.

Design a simple leaf, indicating the name of the different parts of the leaf (lilac, or lime, or pear tree, for instance); next a composite (acacia, chestnut, for instance). (*Space given, half a page.*)

Arithmetic.

A vine owner buys 350 kilos of sulphur at 28 fr. the 100 kilos. As he pays ready money he profits by a certain discount, and only gives 93 fr. 10 cent. What is the rate of the discount? (*Space given, half a page.*)

Short Essays.

(Expand each of the following subjects.)

1. The batrachians: characteristics and metamorphoses. (*Half a page.*)
2. Description of a storm: effects of atmospheric electricity; how to protect oneself against the lightning.

In Calvados five out of six of the agricultural societies for the *arrondissements* hold similar examinations. The examiners are members of the associations and the professors of agriculture. The primary inspectors report to the academy inspector those teachers whose pupils have done particularly well, and the former receive medals and diplomas. Some even obtain the agricultural decoration. The *Société d'Encouragement* at Paris and other national agricultural societies also furnish subventions. I spoke to one of the inspectors about the practical nature of the examinations. He assured me the question had seriously occupied the attention of the agricultural associations, and that it now was really a thorough test, though he admitted that elsewhere teachers have sometimes taken it up as a speculation. (He spoke of one teacher as a *malin qui avait décroché une décoration*.) The system of agricultural education is probably more developed in Sarthe than in any other part of France. Last year (1899) for the prizes given by the agricultural society there were over 400 candidates in the *arrondissement* of Mamers. The children were all orally examined, and the questions bore particularly on the exact cultivation of their own particular district. Sarthe is particularly well equipped in agricultural education, as it possesses a professor for each *arrondissement*, as well as a departmental professor. For the whole of Sarthe there were last year (1898) over 800 candidates. The examination was held at thirty-three centres, mainly *chefs-lieux* of cantons, and it took a peripatetic board of examiners eight days to do the oral work. Again, in the regional examination, held by the Ministry of Agriculture every four years, in each of the four divisions of France, Sarthe, which is in the Western Division, obtained far the most prizes in the competition for that region. In Indre-et-Loire, in addition to the *concours agricoles*, I found there are *expositions agricoles*, at which the teachers exhibit the results of their experiments. The day is further utilised for the distribution of the rewards to the successful pupils in the agricultural competition, who are invited up to receive their prizes. Their expenses are paid, and the day is looked on as a very pleasant outing. These annual exhibitions are arranged by *arrondissements*, and are held in turn in the various *chefs lieux* of the cantons.

School
agricultural
exhibitions

The moral of the whole curriculum of French primary education will be lost on English readers if they have not seen, from the brief notes on the ordinary subjects and the detailed examination of agricultural education, the way in which the subjects not only dovetail into one another but also overlap, with the result of producing, not indeed confusion, but cohesion.* Thus the reading lesson is drawn on for *la morale*, the *morale* in its turn draws upon the history book, the history book is worked in with the geography, the geography, through its physical features, finds its basis in

The
curriculum
as a whole.

* The exact limits of the co-ordination of studies are well indicated in the "General Report of the Board Inspectors" to the London School Board (1901).

Some Schools of North-west France.

At the school again, the point is *depart* for the agricultural subjects, and success with arithmetic in the *comp*...
...arithmetic is studied for the practical geometry...
...drawing syllabus, the drawing...
...writing is worked through...
...of which springs again the...
...writing ground for the...
...of subjects are not only...
...And now, perhaps...
...isolate such a subject...
...that cannot be severed from...
...by cutting into at...
...other subjects, for the parts...
...as the parts of a watch...
...studies that make up the programme

...the further question of how far it...
...to put all these care...
...and follow out...
...different syllabuses, we at once...
...the old difficulty which...
...get a quart of learning into...
...French authorities try to get...
...teachers to insist in their...
...and in this way, no...
...country east, and...
...*Stenbrasse trop*...
...better to regularise...
...and deliberately create...
...schools, as in fact...
...for agriculture. A...
...*certificat d'études*,...
...subjects, with the...
...farmer, and town...
...have the immense...
...to cover too...
...appear to favour the...
...the following...
...suitable to impose...
...the sons of work...
...excellent at Paris...
...village, and that each...
...industrial and commercial...
...the following proposi...
...different programme for town and country...
...a regional programme can be...
...the subject told me he

* *La classe est une écriture particulière, l'écriture de la forme.*—M. Pouillet, Academy Inspector of Cher 1907

had already proposed the idea at the conference at Havre, nor had he shrunk from carrying out the proposal to its logical conclusion of having different types of teachers for the different types of schools.

M. Le Chevallier, the Academy Inspector of Orne, is not only favourable to the change, but wrote about it in the pedagogical press, as far back as 1893-94. The director of a normal school declared himself to be a partisan of the idea, and added that it was acceptable to many inspectors, but that the *administration* was not yet converted. Government officials have necessarily to adopt a conservative attitude. Yet the problem in France is far simpler than with us. There is an absence of many complicating factors. The great inequalities in English salaries tend to rob the country of its best teachers, especially as the most valuable posts are in the towns. In France the towns possess but little economic attraction, for salaries are independent of localities. Hence rural teachers are less tempted to desert the country. A further tie is their official position as a government servant, which gives them a certain status in the village, to which they are often attached by birth or connexion. For, as has been already pointed out, the ordinary teacher often exhibits a strong tendency to gravitate back to his village or at least to its neighbourhood. There is already, therefore, a sort of unconscious selection at work among the teachers in France of a town or country post, the latter not being such a Hobson's choice as with us. This, combined with a general feeling in favour of some sort of decentralisation with a view to adapting the school more closely to local needs, renders an attempt at some sort of differentiation not altogether improbable.

CHAPTER VI.—THE CERTIFICAT D'ETUDES.

The pedagogical and educational side of French education is supervised, as we have seen, by the inspectors. They look into the teaching given in the schools, and to them is entrusted the task of seeing that only fit and proper persons are admitted to the full exercise of the profession through the *certificat d'aptitude*. But their circumscriptions are often large and the distances very great. One inspector told me there were schools in his district he could only visit every other year. True, there are the annual or half-yearly teachers' meetings, which must be of considerable use in helping to keep the teachers and teaching methods together, even if the inspector does not always get the full value out of them.

The question therefore naturally arises, Is this yearly audit of the schools, with the teachers' meetings to talk over its results, sufficient? Dare the State, which is the largest shareholder in the national schools, content itself with these safeguards? Is not some sort of general examination test

The need of further guarantee. Abstract argument in favour of a leaving examination.

necessary for the masters themselves, to keep them more or less in line, and up to the mark, and to prevent them straggling? Otherwise, with no general standard before them, with no really binding syllabus on which to model their teaching, are not standard and perspective in teaching likely to suffer? Is not such a test an excellent thing for the pupils in presenting them with a definite goal to aim at, at least the most enterprising and promising of them? Such a test must not be an obligatory but a voluntary one, for the examination which acts as a sort of Caudine forks, under which all must pass, is not likely to be popular in any country, and its evils have been sufficiently patent in England to need of no recapitulation. But does not a voluntary test tend to create a sort of intellectual *élite* in primary schools? Why, then, should not what is a good thing for secondary and higher education be good for primary? Surely it is desirable to give to the best of the boys who leave the school some sort of hall-mark which shows that in their school career they have satisfied their natural judges. Are not employers likely to recognise this and give such boy the preference when a post is going? And in this case, is not it of the highest value to promote good relations between business men and the school, and draw them closer together, instead of the present happy-go-lucky fashion in which each party in this country goes its own way and puts all the blame on the other? Does not, at least in a country like France, such an examination escape from one of the great evils of an over-production of diplomas, which, as they imply more or less a Government guarantee of employment, suffer from a similar depreciation as other paper values, when the State has issued more bank notes than it can meet, whereas a certificate for passing the leaving examination in the primary school could never be construed into anything like a claim on the credit of the State for the humblest post? In setting up such a standard of attainment, which all have a chance of reaching if they have moderate abilities, without let or hindrance to their fellows, are not the most dangerous features of indiscriminate, "all against all," cut-throat, competition eliminated, and along with it many of the evils of over-pressure and over-work? And, lastly, when such a test is not written only, but oral, does it not act, not merely as an assay of knowledge, but also as a test for the application of knowledge, by putting a premium on qualities which are of real worth in daily life—presence of mind, power to utilise one's knowledge and intelligence, and to put them forth in a skilful and shapely fashion? Surely the knack of grasping a situation at once, or thinking out a problem quickly, when time is all important, of seeing a point two minutes before one's competitors, is, after soundness of judgment, one of the most valuable factors in business, and oral examinations are assuredly one of the best ways of bringing out such qualities.

The certifi-

It is probable that arguments somewhat of this sort have led to the founding and maintenance of the *certificat d'études* in France.

But though it may be said to have entered into the habits and customs of the people, it has lately been made the subject of a very violent series of attacks, which shows how necessary it is to inquire carefully into all the workings of any system before pronouncing on its ultimate value. So much has this been the case that at the teachers' conference of *Amicales* no less than four reports out of nineteen presented on the subject demanded its suppression pure and simple, and all the others proposed modifications more or less profound.

One of the most thorough reports on the subject was that presented by the Paris teachers. It states that to-day the *certificat* is a hackneyed title which no longer signifies anything. This is due in the first case, according to the report, to the excessive easiness of the examination, and still more so to the abuse of the system of *repêchage*, which consists in going over the papers of those who are "ploughed" and attempting to find extenuating circumstances for such as are just the wrong side of the line, in order to bring their marks up to the necessary minimum. These "humane" proceedings have been pushed to such excess that candidates have been let through because they were at the end of their school time! Again, by the law of 1882 candidates can present themselves as soon as they are over eleven. This provision, which was framed with the idea of encouraging the children to present themselves for the examination, by offering the premium of a year's exemption to those who passed it, has led instead to the growing depopulation of the school and the premature departure of the more promising scholars. Other evils attributed to it are that it distorts the curriculum and creates unhealthy rivalry between the masters of different schools.

The criticisms of the numerous teachers I spoke to on the subject were not so sweeping in character, though on the whole they were rather unfavourable than favourable. The following is a rough table of their opinions. The certificate is a good subject for emulation, affording both teachers and taught a useful objective, according to one inspector, though several teachers said they could dispense with this stimulus. It leads to cramming; this cramming leads to over-pressure for the pupils and over-work for the masters, as one teacher bluntly put it, *c'est la mort aux maîtres*. But some of this over-pressure must be put down to the irregular attendance, according to an inspector. It is true that teachers are told not to press the children, but, on the other hand, they declare that much is required of them. Then another result of the examination is that the non-obligatory subjects suffer. In French schools the last month of the school year is given to revision, and the non-obligatory subjects are more or less dropped in view of the examination. Children are more inclined to leave after the *certificat* than formerly. The examination is good for maintaining the level of studies, but leads to exaggerated notions in the parents as to its value. It is regarded by some as a *petit bachot* (small

Its defects.

The teachers' criticism.

B.A.), confounded by others with the *brevet*, while in Brittany admiring parents look on a child who has been successful as a *petit notaire* (what a pathetic side there is to all this simplicity!), and many openly speak of him as *un petit savant*, who has learnt all that his master can teach him. The *certificat* is good for commercial circles, but its use is less obvious in the country. Again, the oral examination, which might be made most valuable, is too much of a formality. For whereas 23 per cent. are generally plucked at the *écrit*, only 1 or 2 per cent. are plucked in the *viva-voce* portion.

Defence.

This catalogue of defects is certainly a formidable one, but, after all, these criticisms are for the most part criticisms of detail. As the teachers of Paris say very truly in their report on the subject, there is much truth in the harsh criticism that the *certificat* has received, but if it were necessary to abolish all the institutions and laws which have engendered abuses, there would be none left to keep. Now the *certificat* is already an institution. It has become acclimatised, it is regarded as necessary* by many parents and useful by business men, and the drawbacks cited above seem for the most part to be incidental to, rather than inherent in, the examination.

The age factor.

Most of the evils enumerated above come from the single fact that the candidates are presented too young. Being more or less immature they have to be forced by the teacher. This leads to over-pressure on both sides. Were the age raised to 12, or even 13, this would undoubtedly ease the pressure, though the number of those who take their examination before 12 years of age is exaggerated. Of the children who passed in 1896, 73 per cent. were over 12; 15 per cent. were 11 on the 1st January, 1896; 10 per cent. were eleven the day of the examination; and only 2 per cent. were under 11. One teacher, indeed, said to me that to raise the age would lessen the attractiveness of the examination. But, as he added, it was at present a great disgrace to fail at it, it could evidently afford to shed some of its specious attractiveness in order to gain in real value. With the prestige already attached to it, it should rather induce children to stay on and obtain it. By putting up the age first a year, and then at intervals another six months at a time, it might, perhaps, in the long run be raised to 13, a figure that some of the *Amicales* propose. Much can be done by the teachers themselves in discouraging the children from entering so young. Thanks to this system in the circonscription of Blois, practically no children are presented now under 12, and some are nearer 13 than 12. This was largely the doing of M. Charton, the primary inspector. The

other reforms.

*How thoroughly the *certificat* and diplomas generally have become a popular institution may be seen from the following passage from Mgr. the Bishop of Le Mans, who, in a pastoral letter, says: "Le diplôme est entré dans nos mœurs. Il jouit d'un grand crédit auprès des enfants et de leurs parents. On garde, on encadre, on expose avec complaisance cette attestation authentique du mérite reconnu. C'est une gloire de famille. Aussi bien, l'emploie-t-on sans cesse dans le monde scolaire."

neglect of the non-obligatory subjects could be met by including them either in the *écrit* or the oral, and by rendering the latter part of the examination more difficult. One obvious reform is the inclusion of the agricultural examination amongst the subjects which count in the written examination. As for the evils of the system of *repêchage*, it is evidently a matter of stiffening the hands of those who preside over the examinations. A circular from headquarters to the inspectors who act as chairmen of the examination board defining the limits beyond which the prerogative of mercy might not be strained should go far towards checking the abuse.

It is interesting to note that the teachers at their conference voted the necessity and retention of the *certificat* by a large majority, which showed that, despite its current defects, they appreciated its pedagogical and utilitarian value.

But there is one argument which all the attacks on the *certificat* have left untouched, and that is the argument of the interests of the State, which was put forward at the beginning of the chapter. The examination is, in fact, for the State one of the means of verifying the work of the school, and teachers, however honourable and disinterested they may be, cannot, from the mere force of things, be the best judges of how they should be supervised, any more than a body of workmen can prescribe the duties of their foreman, or civil servants lay down the exact manner in which they shall be controlled by the head of the office. Their criticism in this, as in other matters, is highly valuable, but they do not constitute the final court of appeal.

The *certificat* is, happily, by no means regarded as a sort of ark of covenant, on which any one who lays his hand is deemed sacrilegious in official circles. On the contrary, it has already undergone several useful reforms. The introduction of agriculture, first at the oral, and then at the *écrit*, only requires its being placed on the same footing as the other written subjects to prove a most useful innovation. A circular, called the circular Bourgeois, which laid down that spelling mistakes should be weighed rather than counted, has led to an advantageous relaxation in the somewhat Draconian rules that governed the orthographical section of the examination. This side of the examination will be further lightened by the Leygues circular on spelling, which cleared away a certain number of grammatical cobwebs spun by the *a priori* grammarians of the eighteenth century. Though the circular has been in part abrogated by a second circular, it has largely produced the effect desired of inducing teachers to no longer insist on an accurate knowledge of these minutiae from their pupils.

Of the general nature of the examination, and its rules and regulations, there is nothing to add to an exhaustive paper on the subject by Sir Joshua Fitch, published by the Board of Education, which contains a most valuable discussion on its possible adoption in England, that all should read. The following short description by an inspector of how the examination is carried out in the country may not be without interest:—

Claims of
the State.

Previous
reforms of
the *certificat*

Conduct
of the
examination

The examination lasts the whole day. It begins with the dictation, then follows the French composition and the arithmetic. While one subject is being done by the children the preceding one is corrected by the examiners. Then comes the *déjeuner*, which is taken *au galop*, followed by the drawing or the composition in agriculture. This is finished at three o'clock. By four o'clock all correcting is finished, and the classification of successful candidates is made. Those who have qualified for the oral examination are called in. The oral then begins, and lasts till seven. It includes reading, recitation, history, and geography. Only one or two children are plucked at the oral. It is not serious enough!

I was unable to be present at any examination in the provinces, as the best season for seeing the crops did not coincide with the examination "harvest," which comes off at the end of July. I was, however, through the kindness of a colleague of mine on the jury, M. Baudrillard, Primary Inspector of the Fifteenth arrondissement, present at the correction of a huge examination in Paris, which took several days to carry out. I was particularly interested in what I saw, as I came in for the *repêchage*, but did not think the judges were unduly lenient.

There was one point I was particularly anxious to clear up, and that was the somewhat delicate question as to whether political and social influences made themselves felt at the examination, as had been suggested to me in one quarter. With that charming frankness which is so characteristic of the administration, and, it may be added, is such a mark of its strength, the various officials I approached freely conversed with me on the subject, and, as far as I could make out by very careful inquiry, the examination is well safeguarded in this respect. To begin with the pedagogical element are always in a majority on the examination board. The children's names are concealed, and each is denoted by a number. The inspector is president, and, as such, arranges the method of correction. If he even suspects any partiality, or undue tenderness for any candidate on the part of one of the lay members, he can easily checkmate this by getting the paper in question looked over by four or five persons, so that any startling discrepancy in the marking is easily noticed. Again, in the *repêchage* the copy is read out to the whole assembly, and the particular mark is made a point of general discussion. Of course, if these precautions are violated abuses can creep in, but *quis custodiet ipsos custodes?* One cannot protect those who are remiss against themselves.

In each department the setting of the written work is divided up among the primary inspectors, one inspector selecting the questions in one subject, and another in another. In this way uniformity is secured for the whole department. Between the departments, however, there is no rigid uniformity, and I was told that the standard varied accordingly, being higher in the east of France than elsewhere, as education in that region is the most advanced.

To sum up. The *certificat* seems to be a valuable tool for sharpening the nation's intelligence. It has, however, need of further improvements to bring it up to its real pitch of efficiency. Previous reforms show that it is not an unprogressive

Political
influence.

Setting the
papers.

Conclusion.

institution. With the raising of the age, the restriction of *repêchage*, and a few other minor changes, the chief of its present defects should disappear. There will remain the great advantage it possesses in interesting parents in the school, and in assisting employers to select their subordinates. For it is not a labour certificate, which is the sign of a bare minimum of efficiency, but it bears the hall mark of a merit diploma. And, finally, it forms a useful part of the State's audit, and enables the latter to maintain a certain evenness and level of attainment. At the same time it is elastic, inasmuch as the examination papers are not set for the whole country, which would lead to some of the worst species of uniformity, but by departments, which allows of the questions in special subjects like agriculture being framed to meet the needs of the teaching in the district. Yet another proof, if one were needed, of the departmental differentiation which is silently going on !

The bodily transfer of the *certificat* to England would probably be no easy matter. It would be an obvious mistake to make the examination a uniform one for the whole country. If it were made a local matter, perhaps, with the difficulties about areas in country districts, it would be as well to take the county as the unit of area, on the understanding that the examination itself would be held in at least one school in each administrative district. The examiners might include the inspector and his assistants, together with representatives of the school board and managers of voluntary schools. It would likewise be advantageous to invite the Technical Education Committee to participate in the examination, as a certain number of the brighter children in the elementary schools pass on to other classes and institutions in which they are interested. Under the same title the representatives of secondary education might be asked to sit on the Examination Board, for they too receive recruits through the County Council Scholarships from the Primary Schools. The chief opposition to such an examination would probably come from the teachers. They might, however, be conciliated by the adoption of the procedure of the German leaving *certificat*, in which the teacher of the school assists in the examination of his own boys. The French object to this plan on the ground that the teacher cannot be both judge and party. But the trial is not so much a hostile action of the State against an individual, as a friendly one of arbitration, in which the examiners have rather the rôle of assessors than judges.

Possibility of transfer to England.

CHAPTER VII.—THE RELIGIOUS SCHOOLS (MAINLY PRIVATE).

France is under no inconsiderable obligations to the religious Services in orders, and especially to the schools of the Christian Brotherhood the part. (*Les Frères de la Doctrine Chrétienne*), for what they have done for

progress of science in the past. According to the *Pedagogical Magazine* of 15 Dec. 1888, the former Director of Primary Education, and one of the founders of the *Journal Pédagogique de la Seine*,* writes of the progress of the development of primary instruction in France and Europe. Their working is certain of its development and progress by the extreme activity exhibited in the starting point of higher primary instruction, as well as forming the first outline of even secondary education. To them, apparently, also falls the credit of having been first in the field in commercial and industrial instruction. They also, as has been already noticed, upheld the method of simultaneous teaching against the partisans of the method (or monotonous) method, and thereby conferred an important service to national pedagogy. Of their other useful innovations and improvements in the sphere of secondary education it is unnecessary to speak here.

Notwithstanding
of the
fact that

It is all the more regrettable that one has to state that the private religious schools in rural districts, in so far as one can judge by the few specimens only visited, by no means produce such a favourable effect as the State schools. As regards buildings and equipment, there seemed little to choose between the two. It is rather in respect to staffing and teaching methods that the religious schools appear to be inferior. This inferiority is not of yesterday. In 1859 Matthew Arnold wrote: "Hardly anywhere in France (in this the reports of all the inspectors concur) can the private boys' schools, whether they be lay or congreganist, hold their own in the competition with the public schools." And again he states that the instruction "of the best lay schools, however, is unquestionably, on the whole, more advanced," and shows in an interesting note that this superiority goes back as far as 1818, "when the rector of the Academy of Strasbourg gives as a reason why there were no schools of the brethren in Alsace, then, as now, one of the best educated districts in France, that, "dans les endroits plus peuplés, et plus riches, on exige un enseignement supérieur à celui des Frères."

Extenuating
reasons
cannot

In any criticism on these schools, however, it must not be forgotten that they are entirely self-supporting, receiving neither grants nor doles, which makes them a very heavy drain on their supporters. As Mr. Morant, in his able report on "the Higher Primary School of France," well puts it, they "have to compete, by means of voluntary subscriptions alone, without a farthing of State aid or public funds, with the now universally free public secular schools, with excellent buildings, admirable equipment,

* For an admirable account of the life of this saintly personage see the *Journal* May 24 and 25, 1900, which gives a most touching picture of the latter self-effacement of this great man, and his sublime devotion to the cause of the education of the poor. The only part of the records which seems open to criticism is the insufficient notice taken of working men in the same field. This may be supplemented by Matthew Arnold's account in his report (*N.A.*, pp. 23-24.)

and well-trained, State-paid, high-salaried staff of directors and teachers," whereas (apart altogether from the cost of new school buildings, which is wholly defrayed from voluntary contributions) the voluntary schools in England and Wales received from the State in 1898-9 a sum amounting to 77·7 per cent. of the total expenditure on their "maintenance."

Of the schools I visited there were, roughly, two types. Some-
 Organisa-
 tion.
 times the school had been founded by a wealthy local magnate, who also paid the teacher, who was a layman, with perhaps a religious sister to help him. Sometimes the teaching staff was entirely religious, and the building also belonged to them. The two lay teachers I came across were not badly paid (one received 1,200 francs, and was secretary to the *Mairie*). Both naturally enjoyed great freedom in the matter of arranging their lessons, subjects, and time-tables as they pleased, being responsible only to the patron of the school. The religious teachers were not always in so favourable a position. They depend to a large extent on the offerings of the faithful. This is supplemented by the *commissions diocésaines*, and the *curé* has also to put his hand in his pocket. Considering the slender stipends of the latter, who are passing rich on £40 a year, and who generally receive far less—the official income at St. Jean de Livet was only £16 a year—the strain on them must be very heavy.* The *frères*, of course, give their services for nothing, but they certainly cannot be accused of living on the fat of the land. In one school the director told me there were just six francs a day (five shillings) to keep the three of them, himself, an adjoint, and a *frère* who did the cooking.

It has been already pointed out that all teachers since 1881 are
 The teachers.
 obliged to possess at least the *brevet élémentaire*, but there are still in the religious schools a considerable number of teachers who were in office prior to the law. As regards training, I could not discover whether the lay teachers in religious schools are trained at all. Those *frères* belonging to the "Christian Brotherhood" are prepared in the *scholasticat* attached to its novitiate, but the period of training (a year or six months) is far shorter than that in the normal schools. The reason for this is that the religious schools have been very severely handicapped by the compulsory military service. To begin with, their teachers have to serve three years instead of one, like the State teachers. This ordeal proves too severe a strain for some of the weaker brethren, and a certain number throw up their vows before their term of service is over. This causes a shortage in the supply of teachers, and thereby obliges the young novices to largely act as monitors, instead of devoting their entire time to working for the *brevet*. So serious is this lack

* "To-day the cost of the 'free schools' becomes heavier and heavier, and the *curés* are wondering if they will be able to continue. One will perhaps be obliged to largely abandon them."—Extract from letter appearing in the *Tablet*, December 8th, 1900, signed Henri Polack, 2^{ème} Vicaire de St. Augustin, Paris.

of supply in country districts, that in one *arrondissement* I was told on reliable authority, of all the seven religious schools for boys it contains, only one was not actually in contravention with the law in the matter of an adequate supply of teachers.

Methods.

The teaching methods again, according to the inspectors, are inferior to those in the State schools. This is probably due to the fact that the teachers, to begin with, are less efficiently trained, and what is more, they have no such thorough system of oversight to keep them up to the mark as prevails in the State schools. The public inspectors have only the right to examine the registers and the sanitary state of the school, but not the methods of teaching. They are very often asked to do so, but the greater number of them steadily refuse, and the few who do confirm the general opinion given above.

The following passage from Matthew Arnold, in 1859, shows that the practice is a long-standing one:—

So strongly do these establishments (private) feel the advantage conferred by the publicity and stimulant of thorough inspection that they constantly request the inspector to extend his examination from their school premises to their school instruction. Generally he refuses, and for reasons which his English brethren would do well to remember. "If I find the instruction ever so bad or injudicious," he says, "I have no power to get it changed, and I am bound to give public service where I know it can have results." Many an English squire in like manner wishes for the stimulant of inspection, while he is determined to keep his school independent. [The instance is no longer true, though it would be were inspectors dependent on petty local authorities, but it may stand as an illustration explaining the attitude of the French inspectorate.] In other words, he wishes to have a landscape-gardener or an architect to talk to him about his school, to have his advice, and to be free to dismiss him, as he might dismiss the landscape-gardener or the architect the moment his advice becomes unpalatable. He wishes to have a public functionary to act as showman to his school once a year. But it is not for this that the State pays its servants. State supervision is useless if it can be rejected the moment it becomes a reality, the moment it tends to enforce general reasons against individual caprice. The counsel of inspection to be of any real worth must be in some way or other authoritative.

The teaching, as far as I could learn and see, is still largely based on the old scholastic method of developing the memory, though the system is probably less mnemonic than it was. One teacher seemed to me to put the whole system in a nutshell when he openly regretted he had no longer any children who could stand up and recite off two or three pages by heart. This general impression was confirmed by what I afterwards saw in the otherwise remarkable exhibition of the Christian Brotherhood at the Exhibition, and it was endorsed by the opinion and vote of the great majority of my colleagues. It may not be the latest pedagogy, but it showed, at least at the Exhibition, what surprising results can still be obtained by this means. I was glad to have the good fortune to visit the latter, as it helped to lessen the indifferent impression I had received of the religious schools in the country districts.

Religious instruction.

Religious instruction takes up about four and a-half hours a week, but much of this is given at the end of the class. In one

school it only amounted to about three hours. Much pains is taken with the spelling, but the writing, for which the *frères* are renowned, was generally poor. And such copy-books as I saw were neither so clean nor so tidy as those in the lay schools. I was told the *cahiers* are generally very neat, being mostly used to make fair copies of the revised lesson after it has been put on the black-board.

In most of the boys' schools I visited there was no agricultural instruction, but in one school I saw a very fine school museum, with specimens of different kinds of grain and chemicals. In none, however, was there any *champ d'expérience*.

Some teachers present their pupils for the *certificat d'études*, with good results. Others, who fancy that the examiners are down on children from the religious schools, present their scholars for a sort of kindred examination called the *certificat d'études libres*. At Le Mans there is a regular Catholic Committee, who have founded a *certificat d'instruction primaire et d'éducation chrétienne*. The Abbé Laude, in speaking of these examinations in his report of March, 1897, said:—"Our parchments are held in high esteem. . . . Our jury passes for severe. . . . The administration has never spoken ill of our examinations. One has rather spoken of them with deference in simply attempting to make the Sisters believe that the official diplomas are equal to ours." The number of candidates in 1891 was 158, and in 1892 it rose to 391. In 1895, 1,500 children had already taken the examination.

The books in the Christian Brotherhood schools are composed by a special commission. Anonymity is not, however, always preserved; some of the best geographical maps are the work of the Frère Alexis.

The system of prizes and rewards is pushed to a far greater extent in these schools than in those of the State. The "decoration" craze is probably overdone. An inspector told me of one school in which there were ten *décorés* out of sixty boys. In another school I saw an elaborate series of good conduct tickets of three colours (*très bien*, *assez bien*, and *bien*) for the month. The top children get a savings bank book. I also came across a sort of association for the more thoughtful children, called, if I mistake not, the *congrégation de la Vierge*, which no doubt has its religious uses.

The discipline seems to be easy. One teacher told me he solved all difficulties by threatening to send away any boy who was troublesome or unruly. At another school I was present during recreation time, and it was very pleasant to see the *frères* entering heart and soul into the children's games.

The *fréquentation* is apparently better than in the State schools. But there seems to be some doubt at headquarters whether the registers are always sufficiently carefully kept. One register I saw possessed the unique distinction of scoring 100 per cent. for its monthly compared with its yearly average. But it was not always so easy to get a look at the registers. In one school I found there

was a *bureau de bienfaisance*, which did much to help the *fréquentation*, especially in winter.

The girls' schools.

Of the one or two girls' schools I visited, the teachers seemed, with one exception, superior to the *frères*. The children looked generally contented and happy. I particularly recall the two lower classes at Beaumont (Sarthe), where the school is a State one but not yet laicised. The inspector put the children through their paces, and I was allowed to ask them a question or two, with the result that all parties seemed satisfied with the class, not excepting themselves. Both here and in other schools the tradition of good needlework was everywhere in evidence. A large sewing class at the convent school at Ecommoy showed me some very satisfactory work.

The future of these schools.

The boys' schools appear to be slowly on the decrease, which is not wonderful, considering the heavy strain on their supporters.* In most country districts they are only to be found in a few of the small towns. Contrary to expectation, their chief strength lies in the big cities and in Paris, where the Christian Brotherhood have some fine schools. This is partly due to the fact that in these towns they can start paying classes. In rural districts, they are most numerous in the *château* country on the banks of the Loire. The religious schools for girls and infants are much more common, and probably hold their own better than the boys' schools, especially where they can levy fees, a point which gives them a certain air of respectability in the eyes of the small *bourgeoisie*.

Statistics.

The figures of French educational statistics require rather careful scanning, in order to understand their exact significance. The laicisation voted in 1887 has now (1900) been completed for boys' schools, but a large number of the State mixed and girls' schools are still under *religieuses*, who hold the place for life. As these die off they are replaced by lay mistresses, and not infrequently the Catholics open a rival school in the neighbourhood for those girls whose parents wish them to continue under religious instruction. Thus if a State school of 100 pupils is laicised and a religious school is opened alongside and attracts 50 of the old pupils, according to one set of statistics the religious schools will apparently have gained 50 pupils during the year whereas the real truth is that the number of pupils under religious teaching has diminished by 50. This is, perhaps, best shown by the statistics for the schools. For whereas since 1882 the lay public and private have grown from 56,210 to 64,042 in 1897, the religious schools, public and private, have diminished from 19,425 to 18,451. In the period between 1891-1897 the number of pupils under religious teachers has fallen 35,881 (includes Algeria).

Comparison between pupils under lay and religious teachers.

The total number of pupils in primary and higher primary education in 1897 for all France under religious teachers in the State schools was 405,825, and in the private schools 1,197,626, or a

* See page 39 and note on page 149.

grand total of 1,603,451, against 3,823,760 in the lay schools. This does not, however, include the maternal schools. If the pupils in these be added to the above, we find there are 1,955,199 children under religious teachers, against 4,175,656 under lay instructors. Excluding the maternal schools, there are only 436,726 boys in the *Congréganistes* schools, against 2,282,948 in the lay schools. According to their own statistics, the Christian Brotherhood have in France 1,063 schools, with 10,042 teachers and 215,326 pupils. It is worth noting that their schools are managed by regions.

The competition between the State and religious schools, which cannot be altogether an evil, is very keen. I was present at a friendly discussion on the subject between a religious teacher and an official representative of lay education. The *frère* complained of the violent recruitment carried on by the mayor, his adjoints, and all who bore office under him, in favour of the lay school. His opponent retorted that the children were veritably begged by the sisters and other good souls even before they came into the world. Such an example of the benefits of free competition, where there is no fear of the two interests combining, should gladden the heart of an old-fashioned economist. The other side of the shield is not quite so satisfactory, as some parents use the rival schools to play off one against the other, and send their children at one time to the lay school and at another to the religious, to the general distraction of the teachers in each.

The Competition between State and religious schools

CHAPTER VIII.—THE TRAINING COLLEGES.

(a) BUILDINGS, FINANCE, STAFF.

Each department, with a very few exceptions, is provided with a separate training college for men and women teachers, who, as has been already stated, nearly all are natives of the department, and return to its schools when they have finished their training. I visited no less than four of these institutions for men and three for girls, and took particular pains to get a general notion of their working, as well as of the agricultural education they provided, because they are the nursery of the rural teacher and help to explain many points in his culture and character.

We have already seen that according to the law of 1879 the departments were obliged to build and maintain in repair the buildings and furniture of the normal schools, the State paying for the teaching and the keep of the pupils.* I inquired into the cost of some of the buildings I visited. That at Caen, which is an exceedingly fine edifice, standing in its own grounds of about ten acres, cost the enormous sum of two million francs (£80,000). This, however, was built at the height of the educational boom, and the lean years

Cost of building.

* The cost to the State amounted in 1897 to 8,222,683 francs, or about £328,900. The vote in 1900 was slightly less—7,618,320 francs, or about £304,732.

that have since followed have made it impossible to shift the women's college at Caen from its present *locale*, which being part of the ancient palace of William the Conqueror, as an architectural monument leaves nothing to be desired, but is ill adapted to school uses. The *école normale pour les jeunes filles* at Alençon is a very fine new building, two stories high, standing in a delightful garden, and was built at a cost of 600,000 francs (£24,000). The men's college at Alençon was built in 1832 and rebuilt in 1840; it is therefore one of the oldest in France [the oldest of all the French *écoles normales* was that of Strassburg, which was founded in 1810]. Its cost was only 152,000 francs, and this included two and a-half acres of ground. I forgot to ask the cost of the men's college at Le Mans; the women's was erected for about 200,000 francs. At Loches the men's college, built in 1885, cost £16,000, apart from the site, which was given by the town. These sums seem well worth placing on record in order to indicate the liberal, not to say lavish, manner the local authorities have in times past subsidised education.

Cost of
repairs.

The annual cost of up-keep and repairs to the departments, apart from the *amortissement* of the building debt, does not seem to be very formidable. Thus at Alençon the average outlay for the men's college is 800 francs a year for the building, 400 francs for the furniture. Of course, special credits are necessary from time to time. At Loches, for instance, no less than 3,200 francs was spent one year on extraordinary repairs, and in 1898 the department of Loir-et-Cher spent 12,388 francs on a house for the bursar, the State giving a subvention of 8,000 francs as well. These are, however, extraordinary outlays.

Cost to the
State.

The cost to the State naturally varies. The average is rather higher in the smaller colleges than elsewhere, owing to the teaching expenses working out at more per head than in the larger schools. Caen* (men's), about 540 francs (of which about 320 for food, 16 for washing, 31 for books, etc.). Le Mans (women), 486 francs in 1898, 474 in 1899 (293 for food, 30 for washing, 16 for books and paper. Le Mans (men) about 500 francs (of which 307 for food). Loches (men), 580 francs. All the above totals are for maintenance only. Another 500 a year may be reckoned for teaching. This brings Le Mans up to 1,000 francs, and Loches up to 1,080 francs.† The actual figures for Alençon (men) for certain years since 1882 are as follows:—

1882-951.	1890-1,272.	1897-1,251.
1888-1,198.	1893-1,247.	1898-1,246.
1889-1,115.	1895-1,314.	1899-1,291.

* I have to thank M. Vieillot, the secretary to the Academy Inspector, for supplying me with a complete MS. copy of the Ecole Normale budget and expenditure.

† These figures are taken from an interesting monograph on the school prepared by M. Ennray, the director of the school, for the Paris Exhibition which he kindly permitted me to copy.

Salaries are the chief reason for the increased cost in the last instance, as the director is now receiving the maximum treatment of 5,500 francs; on the other hand, one professor has been suppressed.

The State has hitherto paid for the pupils' books, but at the women's college at Le Mans it has been decided that the pupils shall hereafter buy their own, as they have suffered a certain amount of inconvenience in having no books of their own to take away.

The buildings for both sexes were in nearly all cases large and spacious. Even those of an older type, with the exception of the historic monument at Caen, were in no wise incommodious. In fact, with the exception of one school there was always plenty of room for all, and sometimes a good deal over. Thus, at Caen (men's), where I found the largest number, there were 72 pupils and room for 120. The other colleges had less pupils, but still plenty of room. Alençon with 32 pupils had room for 60, etc. The favourite form of building was round a shallow quadrangle with one side open. Time after time I find in my notes, "Class-room big, airy, and well lighted." There are also special rooms for physics and chemistry. In the latter, at least, the pupils not only receive lectures but perform experiments, and adequate *ateliers* are provided for the *travaux manuels*, whether in wood and iron work or in clay modelling and casting. The refectories are generally well lighted and large, though needing at times a new coat of paint or whitewash. Some of the modern kitchens are provided with noble ranges, which, being placed in the middle of the room, allow access on every side. The sanitation is satisfactory. In one or two schools the bath arrangements are insufficient. One director complained that he had only two baths at his disposal. At Alençon (women's) there was a room full of *bains à pied* for all, which fill or empty simultaneously through a simple mechanical contrivance. The dormitories were either divided up into cubicles or open. In the latter case there were generally two rows of beds down the room, though in a couple of schools they were placed three abreast. However, the windows were open everywhere. The dormitories were nearly always well lighted, in fact there was only one which suffered from the want of light. The lavatories were usually in a row at the side of the dormitories. The new school at Alençon (women's) was specially well provided in this respect. The ventilation everywhere was good. As a rule there was always an infirmary, but it generally formed part of the building; in one case the two sick-rooms were next the linen rooms, and in another adjoined a passage where the pupils' rifles were kept.

The ordinary staff of a normal college consists of a principal, with two professors of letters and two of science. When, however, the number of pupils falls below a certain level one of the professorships is suppressed and the work divided up between the principal and the remaining professors. This makes the work of the principal rather heavy, as he always takes the *morale* and pedagogics. In one school I found the director had eighteen hours' school work besides his duties as director.

Condition
and arrange-
ment of
buildings.

The staff.

recruitment
and salaries
of the staff.

The directors are recruited by the same methods of examination as the inspectors, and in fact are generally taken from their ranks. The directresses are also selected by the same examination. The former are divided into five classes, and receive from 3,500 to 5,500 francs a year. (The directresses receive from 3,000 to 5,000 francs a year.) They are also lodged, and have other allowances. One of the professors acts also as *économiste*, or bursar, for which the pay is about 300 francs a year. A separate bursar is only appointed in schools with more than 60 pupils. The duties of the bursar are to keep the books, buy the food, or look after it when bought by contract, and see that furniture is kept in proper repair. A special book is also obligatory, in which is kept an account of all the garden produce sold or consumed on the premises. The duties seem rather lengthy. A married *économiste* told me she came sometimes at 6.15 in the morning and left at 7 p.m., her teaching duties taking up most of the forenoons and afternoons. The bursar is evidently an important person, as he is regularly "sworn in," and has to deposit caution money. The *travaux manuels* are nearly always taught by one of the professors of science, but agriculture is taught by the departmental professor. Singing and gymnastics are often taken by outside professors, and drawing and English (or German) sometimes. The number of teaching hours varies from 16 to 18 (Rapport E. P.). Professors in the normal schools are divided into five classes and paid from 2,500 to 3,400 francs a year. Lodging and board are included. In the women's colleges the salaries vary from 2,200 to 3,000 francs. These teachers are nearly all trained in the *écoles normales primaires supérieures*, where they are not only taught and trained to teach, but also to teach teachers.

(b) RECRUITMENT, DISCIPLINE, EXAMINATIONS.

régime.

The normal schools depend directly on the rector, who either supervises them himself, or makes the academy inspector his deputy. An annual inspection is also carried out by the *inspecteurs généraux*, and by special *inspecteurs* for drawing and for auditing the accounts. Each school has a "*conseil d'administration*," composed of the academy inspector, four members named by the rector, and two representatives of the departmental council. Their principal duty is to look after the budget, which is drafted by the head of the college upon the useful principle of always asking for more money than is likely to be spent.

manner of
recruitment.

As regards the method of recruitment, the departmental committee proposes every year to the Ministry a certain number of free scholarships at the *écoles normales*, sufficient to secure the service of the department. This, however, is not infrequently cut down. The social class, districts, and schools from which the successful candidates come have been already discussed. The possession of the *brevet élémentaire* is a *sine qua non* for admission to the examination, which is both written and oral. Gymnastics are included in the

examination for men, and sewing in that for girls. Candidates are put up at the normal schools, and during the week their examination lasts they are subjected in addition to a sort of searching moral and intellectual inquiry by their future masters. Several principals complained that the pupils come to them badly prepared. Two of the directresses thought they were unduly pressed and taken over too much ground. The same defect was emphasised by a director, who further pointed out that when the pupils enter the college they are obliged to go over it again in a more thorough fashion. This rather spoils the freshness of the subject. His remedy was to make the *normale* section in the higher primary school lead up to the *école normale* more than it does, and even shorten its curriculum, so that the pupils might enter the normal college earlier, and remain five years.

Calibre of recruits.

Discipline.

Up to 1880 the discipline was more or less monastic. Masters and pupils were subjected to a *régime* that assimilated the schools to lay seminaries. Since then great progress has been made. At Caen I came across a director whose methods would gladden the heart of any Anglo-Saxon pedagogue. He had done away with *surveillants*, and made the head pupils responsible. This only left the director and the bursar as the sole representatives of law and order. The pupils were, further, allowed to go unattended to outside lectures, and were also free on Sundays, after they had been received by the director from nine to eleven. Certainly to an English mind the gradual relaxation of discipline in favour of persons who are within a year or two to occupy responsible positions seems to be the true apprenticeship of liberty. I am glad to be able to add, from what I heard incidentally from another quarter, that the pupils do not abuse their freedom. In another school there was a *surveillant*, but as he was also a master there was not that unfortunate separation of the rôles of the educator and the teacher which so often prevails in French schools. I found a similar system at work elsewhere the director of which wrote in 1898 as follows :—

What is needed is not a suspicious oversight, hostile to the pupil, seeking to catch him in the wrong, but, on the contrary, an oversight that supports him, comes to his aid, warns him, and preserves him from mistakes—in a word, which is preventive rather than repressive.

These ideas are not always, however, held in honour. I came across another director who had originally been in a secondary school. He, too, had no *surveillants*, but it was much against his wish. The professors were all married, and therefore had to live out. He made the strong remark that the want of surveillance deterred parents from sending their sons to the school, and he regarded with dislike the idea of having a practising school in the town, because the pupils would have to go through the streets to it. Still, such is my natural obstinacy, I venture to think the future is rather with those who hold the opposite ideas, but it is none the less necessary to register and respect the opinions of the other side.*

* Though the teachers as a rule have no supervision duty, they are all expected to take an active part in the life of the school.

[illegible]

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

4. The fourth step is to implement the plan. This involves assigning tasks to team members, setting deadlines, and monitoring progress to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves comparing the actual outcomes with the objectives and goals to determine the effectiveness of the project and identify areas for improvement.

[illegible][illegible]

ÉCOLE NORMALE D'INSTITUTEURS D'ALENÇON.

Année 1898. Mois de Juin. 14 Semaine.

MENU DE LA SEMAINE.

DIMANCHE :	Potage maigre, fromage.	JEUDI :	Café au lait.
LUNDI :	id. id.	VENDREDI :	Potage maigre, figues.
MARDI :	id. confitures.	SAMEDI :	id. pruneaux.
MERCREDI :	id. sardines.		

		MATRES.
DIMANCHE	Dîner : Potage gras Tripes, Charcuterie, Café. Souper : Bœuf mironton, Salade, Cerises.	Œuf sur le plat. Pommes frites.
LUNDI	Dîner : Potage maigre Porc rôti, Pommes purée. Souper : Bœuf mode, Haricots.	Radis et beurre. Salade.
MARDI	Dîner : Potage Gras, Bœuf bouilli, Radis roses, Petits pois. Souper : Mouton rôti, Salade.	Artichauts. Œuf à l'oseille
MERCREDI	Dîner : Potage maigre, Sautissées aux choux, Asperges vinaigrette. Souper : Bœuf au jus, Macaroni Gratiné.	Haricots verts. Salade.
JEUDI	Dîner : Potage gras, Bœuf, Cresson, Carottes au jus. Souper : Veau rôti, Salade, Fraises.	Œuf sur le plat. Petits pois.
VENDREDI	Dîner : Potage maigre, Poisson, Pois, Mange-tout. Souper : Œufs à l'oseille, Riz au lait.	Côtelette de mouton. Grillade de bœuf.
SAMEDI	Dîner : Potage Maigre, Bœuf rôti, Pommes frites. Souper : Ragoût de veau, Lentilles.	Radis et beurre. Salade.

Alençon, le 17 Juin, 1899.

Le Directeur,
ENNRAY.

The food was good, and there was no stint, and this is borne out by what the pupils themselves told me in another school. The pupils generally wear blouses, even in class, which produces rather a curious effect on an English eye.

Pupils remain three years at the school. At the end of each year there is an examination called "*de passage*," which pupils must pass or else leave the school. From such statistics as I saw it seems probable that pupils are hardly ever refused their promotion from one year to another, the figures for all the colleges that I saw being cent per cent. in passes. The progress of the pupils is communicated to the parents by means of reports, which no doubt help to keep them up to the mark. Places were determined, at least in one school, by the results of weekly examinations in French, arithmetic, and science, etc., covering the work of the last six weeks. It is in accordance with these places that pupils are appointed to vacancies on leaving the college. All students prepare for the *brevet supérieur*, but two directresses said to me it might be an advantage for some girls not to be obliged to prepare for the higher examination, but to concentrate on certain subjects.

Internal
examinat

(c.) CURRICULUM.

(1.) *For Men.*

The main lines of the present programmes were laid down in 1881. I was assured that the programme is absolutely the same for all France.* In defence of this uniformity it was urged that one cannot foresee the future of the teacher, and that, after all, a knowledge of agriculture is not a disadvantage even to a town teacher. The only difference therefore between the various colleges is the arrangement of the time tables. The first part of the day is assigned to the harder studies; singing, manual work, and agriculture are generally taken in the afternoon. I heard no complaints as to the curriculum being too extensive or difficult in the men's colleges; in the women's the two directresses, alluded to above, thought the programme was rather too heavy a burden for the more backward pupils.

The programme in the men's college is as follows:—

SUBJECTS.	Total of hours a week.		
	First year.	Second year.	Third year.
<i>Literary Teaching.</i>			
Psychology, morale, pedagogics - -	2	2	2
French language and literature - -	5	4	4
History and civic instruction - -	3	3	3
Geography - - - - -	1	1	1
Writing - - - - -	2	1	—
Modern languages - - - - -	2	2	2
† For conversation - - - - -	+1	+1	+1
Total for literary subjects - -	15 (16)	13 (14)	13 (14)
<i>Science Teaching.</i>			
Mathematics - - - - -	3	4	4
Physics and chemistry - - - - -	2	2	3
Natural science and hygiene (including geology in last year) - - -	1	1	1
Drawing and modelling - - - - -	4	4	4
Theory of agriculture - - - - -	—	1	1
	10	12	13
Manual and agricultural work - -	5	5	5
Gymnastics and military drill - -	3	3	3
Singing and music - - - - -	2	2	2

* On writing my report it struck me that I had not seen any agricultural operations at the Auteuil training college. I therefore wrote to my friend, the principal, M. Devinat, to inquire whether the pupils were prepared for agriculture, and, if so, in that case, whether the point aimed at was the cultivation of the Parisian pavements. He replied: "The programme of the normal schools is the same for all France, and we have at Paris a course of cultivation. But reassure yourself. The programme is an elastic thing. Use is made of it in a reasonable fashion, and account is taken of environment and circumstances; and that is why we do not teach our pupils to cultivate the Parisian pavements."

† The hour for conversation is taken either out of the school hours or the pupils' free time.

I was present at one or two lessons other than those on agriculture. One on French literature was devoted to Chateaubriand. I do not know whether my sudden apparition startled the pupil who was criticising his *mémoires d'outre-tombe*, anyway it had the effect of checking the flow of his eloquence. The professor, however, saved the situation, and the lesson as a whole was a good one, as might be expected of any lesson on literature in a French school. A lesson on mathematics in another school impressed me very favourably. The sixth (not the first) pupil in the third year tackled at sight a stiffish problem in geometry set at the last examination for the *brevet supérieur*, and solved it in a most satisfactory fashion almost without the teacher's aid. A preliminary lesson on the geography of Algeria was remarkable for the clearness of its introduction. A revision in arithmetic in another school was less successful. A sort of "rot" set in, which all who have been teachers have some time or other experienced, and one pupil after another came up to the blackboard only to be ignominiously dismissed. A history lesson was chiefly noticeable for the clear *résumé* given by one of the *élève-maître* of the previous lesson, explaining the state of affairs that led up to the War of Independence in America. Apparently the pupils do not prepare the lesson, but the professor lectures, and then gives a *résumé* which they get up by heart; the professor, however, recommending certain books and authors to be used in connection. I came across one or two teachers of English who seemed to be thoroughly masters of their subject, and spoke with a remarkably good accent. This is due to the fact that most of these teachers have spent a year, or sometimes two, abroad, thanks to the excellent system of travelling scholarships established by the French Government. The conversational side of the teaching is further cultivated, at least in the women's colleges, by the engagement of English *répétitrices*. I came across two of these girls, who were both going into teaching afterwards. They each spoke well of their sojourn in the schools. My opinion of the satisfactory fashion in which English is taught, considering the limited time allotted to it, was further confirmed by the perusal at the exhibition of one of the best monographs on the subject by the professor at the Douai Normal School, which I am pleased to think received the reward it merited.

The programme in manual work was fixed by the decree of the 3rd January, 1891, by which three hours a week during the three years are given up to this subject. The pupils begin at the very beginning. At Caen, I saw the first year at work making cardboard boxes. The teaching of geometry and geometrical drawing runs parallel with the manual work. I afterwards visited the show-rooms of iron and wood work, together with the *modelage* and *moulage*, for a selection of which the school received a silver medal at Rouen. I was lucky enough to catch the second year at work in the normal school at Le Mans. The pupils were engaged on wood-work and turning. The system seemed well throughout, and graduated in difficulties, the first object to be made being

Impression of
one or two
lessons.

Manual
work.

a little model ladder in wood. Pupils were allowed to keep their work. They were also instructed in the making and mending of tools—a very practical object. There was some forge work (though the teacher said it took too much time to do much with it), as well as a lot of useful wire-work. The class appeared very keen, and the teacher very enthusiastic on the subject. In the same school, the third year were busily engaged in modelling in clay, and seemed also to take great interest in their work. Considering the thorough way the pupils are trained, it is almost a pity they have not a chance of utilising their skill in the rural schools.

Gymnastics

In the men's training colleges a good deal is made of gymnastics, for which a certificate can be obtained. In the school at Alençon over 150 have obtained the certificate, and in 1898, in Sarthe, the whole third year passed this examination. The third year at Blois accomplished a similar feat.

Additional subjects.

In addition to the regular programme, I came across in one school a class in "hippology" given by a veterinary surgeon, by the leave of the rector, and paid for by the department. This seems very sensible, considering the frequent intercourse of the teachers with the farmers, provided it is made practical enough. Another subject studied in the same school was *dialectologie*, or a study of the dialect of the district. Certainly the services of the teachers might be enlisted in taking down and collecting the fast vanishing forms of *patois* in country districts; but, otherwise, the utility is less apparent. At Loches, bookbinding is taught to first year pupils.

(2) Science applied to Hygiene and Agricultural Teaching.**Aims and objects of the teaching.**

Physics and chemistry figure in the programme of the *écoles normales* with practical work, at least in chemistry, for the pupils. The teaching throughout is as concrete as possible, and hygiene and agriculture are treated as the logical outcome of the science thus taught. The object of the whole course is to render the future teacher capable of teaching agricultural notions in the day school, and of collaborating in the evening school by his action on adults in the work of the departmental professor of agriculture. By the circular of 20th March, 1897, a further development of hygiene is recommended in the direction of instructions on the dangers of alcoholism.

"The teaching in agriculture is given by the departmental professor of agriculture. The course, spread over forty lessons (in the second and third years), includes the study of vegetable and animal production, with practical notions in fruit and vegetable gardening, notions of zootechnology special to the animals of the district, of agriculture, and silkworm culture, the hygiene of live stock, the elements of rural economy. Great stress is rightly laid on agriculture, excursions, on practical experiments in gardens, and on farms. Each normal school is naturally provided with a cabinet of physical apparatus and a chemical laboratory. In addition it possesses natural history collections, a botanical garden, intended for experiments and for work in fruit growing and market gardening,

in which the pupils execute themselves the principal operations of gardening, breaking up the soil, hoeing, spreading manure, sowing, weeding beds, grafting, training, pruning, trimming, etc., fruit trees and the vine."

Such is the description given by the Report on Primary Education which I have already had so often occasion to quote. As far as my experience goes, and it is limited to four or at most five departments, I cannot say that these ideas have been altogether fully realised in France. Great progress, however, has been made since M. Kovalesky made his inspection in 1890. Believing that some of his criticisms on the then existing state of affairs may not be without value or interest for us in England to-day, I give a very brief *résumé* of agricultural education as he found it in the normal schools at the time of his visit. Not yet fully realised.

He divided up the teaching then in vogue into four types. The first consisted of a theoretical course in school, with some digging in the school garden, which was more of a recreation than a serious method of giving agricultural instruction. How it was in 1890. The second type he describes as being mainly of the horticultural or kitchen garden order. The third type consisted of a theoretical course with *champs d'expérience* cultivated by the pupils, cultivation being sometimes by groups. The defects of this system were that the *champs d'expérience* were often badly kept and too small, and the crops came to maturity during the holidays. He further insisted on the danger of experiments on too small a scale, and the hasty generalisations they engender. The fourth type was represented by the system of sending teachers after their normal course to an agricultural school (*école pratique d'agriculture*) where the teacher received a theoretical education and took part in the practical work.

It is worth noting that this fourth system, preferred by M. Kovalesky, has been abandoned. One objection to it was that the teachers from the towns did not like it, especially as they had to pay 150 to 600 francs out of their own pockets and forgot their other studies during the year on the farm. M. Kovalesky further considered the number of visits to farms insufficient, and regretted the bad state of the college gardens. He also remarked that the departmental professors of agriculture were so overworked that, despite themselves, they were obliged to neglect the practical side of their teaching in the normal schools. He noted the despatch of seeds by the Museum at Paris, and referred to the Russian method of supplying seeds and seedlings free to normal schools up to a cost of 50 francs. In his opinion, the ideal garden should contain a nursery, a kitchen garden, trees in the open, or vines, according to the district, a small botanical garden with specimens of food, medicinal and poisonous plants, and an ornamental garden. The two objects of the garden should be: (1) to supply the professor with illustrations for his lecture; (2) to provide work in gardening for the pupils. He further proposed to have special agricultural teachers in the normal schools, and deprecated mere

weeding by the pupils as unnecessary, suggested the working of pupils in groups, and insisted on the need of a skilled gardener being attached to the school. He wound up by advocating an "agricultural test" at the final examination, more practical experiments, higher cultivation in the gardens, a sharper surveillance of the pupils when at work, and more frequent visits to farms.

Theoretical
teaching
probably
satisfactory.

The agricultural education as given to-day is certainly far beyond these experimental stages. The theoretical instruction is probably well organised, the departmental professor of agriculture taking care to adapt his course to subjects particularly applicable to the department. Thus, in one of the schools, I had the pleasure of listening to an instructive lesson on cider making, which, with butter and cheese making, was the staple industry of the district. The professor gave an admirable *exposé* of the various methods of making cider, and alluded to certain practical experiments in fermentation which had been made in conjunction with the pupils. While stating what were the chief reasons in favour of this or that process, he was careful to bring home to the pupils the numerous points on which we are still ignorant of the real action of fermentation, and to impress on them not to be led away by the often erroneous explanations of the peasants.

Importance
of practical
work.

The real test, however, of all this teaching is the practical work to which more than twice as much time is devoted as is given to the theoretical part, and this certainly seemed to be the less satisfactory side of the teaching, though the outdoor work and teaching are certainly much improved since M. Kovalesky's time.

Description
of four
gardens.

In one department I was informed by a high official that the agricultural teaching was not up to much at the *école normale*. The departmental professor was keener on holding conferences and beating up the peasants to attend them. On the other hand, I learnt on good authority that the work was serious, the pupils took delight in it, and went in for pruning, grafting, and gardening generally with much zest. The garden itself was not large, but fairly well kept. It contained a small *champ d'expérience* and a botanical garden. The *champ d'expérience* seemed scarcely big enough to merit its name. In addition, there were some experiments in pot cultivation, preparations of subsoils by pupils, and some small pear trees planted by the pupils. They had also done a certain amount of grafting on rose trees, and there were a few fruit trees for them to try their 'prentice hands on. The director seemed fairly content with these results. Another school had a very big garden amounting to nearly ten acres, of which about six or seven were under cultivation. The garden was rather foul. Dandelion was much in evidence, and an attempt was being made to bury a large quantity of this. There were several experimental plots with potatoes, cabbages, etc., which were not very successful owing to the season. Certain patches had been handed over to groups of students

to cultivate. The fruit trees were rather cut by the wind. They afforded a fine instance of the damage possible from noxious insects, for caterpillars and snails abounded. Grafting is taught by the gardener. Altogether, I was not very favourably impressed by the practical work. It did not seem to be thorough or systematic enough. As regards the interest taken by the pupils in the work, I had the good fortune to speak about it with some of the *élèves-maîtres* whom I met. They told me they were allowed to dig but not to plant. The work that interested them most was the pruning. Of their comrades, there were some who were indifferent, others were very keen, and often spent their half-holiday working in the garden.

In a third school the garden was large and well kept. The potatoes were well advanced, and there was a very fine row of standard roses, and a splendid show of apples, but that was nearly everywhere the case: the apricots, however, were "shy." There was also a very fine bed of asparagus. The garden supplied the school with 600 francs worth of vegetables, and sold for another 250 francs. The garden was about $2\frac{3}{4}$ acres. As for the agricultural teaching, I was told the theoretical instruction was good, but the departmental professor did little practical work. Now and then he teaches a little pruning, and sometimes takes the pupils into the garden to illustrate some point in his lectures, but more often he is away; in fact, he only comes about once a week, and the pupils dig and garden under the guidance of the gardener and the director. They do a good deal of hard digging. There are no real experimental plots.

About the fourth garden I also heard rather contradictory accounts. One official told me the work was satisfactory, and I was informed in another quarter that the teaching was serious, and the pupils took delight in it. Against this I must set the opinion of another authority, who assured me the teaching was superficial and somewhat neglected by the departmental professor. The latter was often absent during the hours of practical work. The director had himself been obliged to set the pupils to work. In the garden I was shown a part which had been reserved for practical experiments, but the professor took no trouble about it, so it is now cultivated in the ordinary way. There is, however, a botanical garden. The garden itself is neatly kept, and though not over large furnishes the college with all sorts of vegetables except potatoes. The cost of the upkeep of a garden was in one case £60, but about £40 of this was covered by the value of vegetables sold or consumed on the premises.

I was further told by a competent authority that in the normal colleges of several departments the agricultural instruction is poor, although it counts for the final examination. There is not enough surveillance, and the pupils take it easy in consequence.

It seems from these notes that, though considerable progress has been made, and the aim and object of the education thus given has been clearly thought out and defined, the

Conclusions.

programme, so far, has not been thoroughly realised. Before any blame is assigned, however, to the departmental professors of agriculture, it must be admitted that if they tried to do all the work that really wants doing, they would not be able to do it even if they worked twice as hard as at present. Apart from their duties in the *écoles normales* (for they also sometimes give courses in the women's colleges), they have their conferences, their *champs d'expérience*, their laboratory investigations, which range from original research to the analysis of soils and manures, and their consultations with the peasants. Perhaps under the present conditions the best way of lightening their task would be to place, when possible, the special professors for *arrondissements* directly under them. This would enable them to delegate some of their duties, and prevent a certain amount of overlapping and waste of co-operation which comes from the present independent state of the special professors. In theory, indeed, the *écoles normales* have joint claims on their services, but as the professors depend on the Minister of Agriculture and not of Public Instruction, these claims are not always easy to enforce. Yet it is not enough to free the over-worked departmental professor from some of his numerous duties. If the agricultural teaching is to be the real outcome and practical issue of the science instruction in the school, there must be close co-operation between the professor of science and the agricultural professor. They must play into each other's hands, and arrange their several courses in such a fashion that one may be the natural sequence of the other. As for the practical part, it should be rendered as systematic as it can be, and the experiments should be adapted as far as possible to the agriculture of the locality, and finally, these experiments should be as largely as possible performed by the pupils themselves. By all means let them do their fair share of digging and hoeing, but they must also be allowed to sow, to plant, to graft, and to prune. If all these things, which are now done intermittently and in part, are done thoroughly and systematically, in fact, if the interlocking between theory and practice be complete, there seems no reason to doubt of the ultimate success of agricultural education in the French normal schools.

Grafting.

Allusion has already been made in the section on agricultural education in the schools to the prominent part played by some teachers in the reconstitution of the vine in certain departments. This movement has now gained some of the training colleges, with the result that the pupils have taken up the subject with great ardour. Thus at Blois in 1898 twelve out of thirteen of the third year gained certificates for grafting.

Holiday
courses in
agriculture
abandoned.

Over and above the training in the normal schools there is no agricultural instruction for teachers in France. Holiday courses for those already in the profession have been tried in some of the training colleges and abandoned. It is true a few teachers, after finishing their normal course, have gone for a year to the agricultural colleges, but then they have afterwards taken up agricultural teaching as a profession.

(3) For Women.

The programme for the women's training colleges is the same as regards the literary part; but the scientific part is reduced. On the other hand, they are instructed in domestic economy. The practical side of the curriculum includes, in addition to gardening, first aid to the wounded, sewing, and, in some cases, laundry work and cooking.

As regards horticulture and agriculture, the first is a necessary accomplishment for an *élève-maîtresse*, as many of her pupils will be expected at home to look after the gardens. Hence, in the few schools I visited, there seemed to be a certain amount of gardening going on wherever it was practicable. At Alençon, for instance, nearly all the pupils go in for it, the favourite method being the *jardinage à deux*. As, however, many female teachers become in time the head of mixed schools, it is clear they likewise require a certain amount of training in agricultural teaching. It is not surprising, therefore, that a course of agriculture, relating especially to the poultry-yard, butter and cheese making, etc., has been established at the normal school at Caen, and I heard of another to be started at Le Mans.

At the Caen school four pupils prepare the food for the mistresses' table twice a week for a week. The lesson lasts from three to four hours, and the cooking was only once a failure. The mistresses' table is taken because there are less to cater for and more variety. The building used for the purpose was originally meant for an infirmary, but the lower part proved too damp. So permission was obtained to use the rooms on the ground floor as a kitchen. The table, dressers, etc., were all put together on the spot, so there was practically no initial outlay. The directress kindly showed me over the place herself. We found the pupils hard at work preparing some mutton cutlets, and certainly they seemed to take great interest in their *métier*. At Alençon cookery is taught by the *économiste*, who personally conducted me over the building. Pupils make little dishes. The lesson lasts about an hour, and is confined to the third year students. At Le Mans I found a course of cookery for the third year. Once a week (Saturday) the girls prepare their own dinner.

At Caen no washing is done in the school, but every week the washerwoman leaves a certain number of things that have not been starched or ironed, and a graduated course has been formed in laundry work, consisting of groups of six pupils at a time. It takes the place for these of their Thursday afternoon walk. This practice, the directress told me, was not general in all normal schools. At Alençon, however, all the ironing is done in the schools. Pupils work at it in groups of eight. At Le Mans the washing is done in the town, but pupils iron their own linen.

At Caen there was formerly a good deal more than at present, as an hour a week has been taken out. The reason probably is that

it is not obligatory for the *brevet supérieur*, for which all have to work, though demanded at the *brevet élémentaire*. At Le Mans the sewing takes two hours a week. It is not ornamental but practical. Formerly the girls made their own dresses, but the practice has been abandoned, as it took too much time.

At Alençon the *exercices physiques* take place in recreation time. I saw the gymnasium, which is a very fair one. The directress of another school told me that Swedish exercises were almost unknown. A lady who had been in Switzerland had introduced them at Dijon and Versailles. She herself would not object to these things if they took place out of school hours.

(d) THE TRAINING.

The pupils in the French normal schools arrive altogether untrained. At most they have acted occasionally as monitors at school.

There are two types of practising schools. The training is given either in an *école annexe*, or school inside the building, or in an *école d'application*, which is an outside school attached to the college. I visited several of these schools, including one maternal one. The system of training varies from place to place. In some colleges the pupil teachers teach for a whole week on end; in others they divide their time between the college and the training school, passing the morning in one and the afternoon in the other. But the time allotted in both cases (60 half days) is the same in both, which is roughly equivalent to a month a year for two out of the three years of the pupils' stay at the school.* In addition, every Thursday or Sunday morning a model lesson is given by the third year pupils before the principal and the head of the *école annexe*. The practice at the girls' school at Caen is for each pupil in turn to give public lessons, specially prepared, of half an hour each while she is in the training school. Later on she gives a lesson once a week in college before the last two years, the class being brought into the college to be taught. When the lesson is over, pupils and mistresses criticise it. At another college I came across two pupil teachers hard at work correcting the scholars' work. The *cahiers* struck me as not being so good as elsewhere, and the writing was indifferent. In another *école annexe* the principal feature of the school was the drawing, which was very good. The writing seemed poor throughout. The teaching by the *élèves-maîtres* revealed nothing remarkable. The same criticism applies to the reading. Altogether the school produced on my mind a somewhat mediocre impression. In another *annexe* school which I was shown over, there were three classes but only one master. The rest of the work was done by the *élèves-maîtres*, who spend the usual month a year in the classes, which in this case were rather larger than usual. I saw nothing very note-

* They do not start teaching till the Easter of their first year, and leave off at Easter in their third year.

worthy either way in the exercise books. The writing was rather below the average. In one of the lower classes a pupil teacher was trying to give an object lesson on a cylinder. He did not seem to be very expert. The director helped the class out with questions. They replied with plenty of verve and go, which showed they only wanted a good class leader to be a smart lot. I was taken over another *école annexe* in which there were only twenty-eight pupils for four divisions. The reason for this was the existence of a religious school in the commune, which gets the bulk of the children, and the town itself was too far away to have an *école d'application* in it.

I only saw one *école d'application*, but that was such a good one that, if the others are only something like it, they should certainly be superior to the ordinary run of *écoles annexes*. The school itself was at Alençon, where there had previously existed an *école annexe*, which only contained fourteen to sixteen pupils. This had been suppressed, and one of the four schools had been taken on in its place, containing about 300 pupils with a director and four *adjoints*. I visited this school. The classes were rather big, 30, 42, 35, etc. But the director was evidently a first-rate teacher. One thing that struck my eye at once was that he put his worst children in front. The class room unfortunately was lighted from the wrong end. The reading was very good both separately and in chorus, and the class took great interest in the subject, which was about carrier pigeons. In the third class the teacher showed his *cahier* for preparing lessons, which was a model of clearness and neatness. An *élève-maître* in his second year was taking the fourth class when we arrived. He was giving an object lesson, but I am afraid our posse of four frightened what little method he had away. After attempting to reassure him we left. On our return to the first class we found an *élève-maître* of the first year teaching drawing. He went about his work in such a quiet and business-like way I was obliged to ask how he had so rapidly acquired this professional manner. It turned out that he had been monitor in his father's school. The director further informed me he had made a point of holding reunions once a week with his subordinates in order to provoke criticism and discussion. This accounts for the feeling of unity that seemed to pervade the school, and is due no doubt in part to each teacher being content to work at his proper level. Several authorities I spoke to were in favour of adopting an *école d'application* for the *école annexe* where it was practical. Certainly the few *écoles annexes* I saw struck me as being generally inferior to the ordinary run of schools, and this, I am told, is due to the fact that the *école annexe* is often used as a sort of "dumping ground" for unsatisfactory children. The chief defect, however, in my humble judgment, is that the majority of the classes are too small. The pupil teacher who has learnt to handle one of these skeleton brigades with eight or ten pupils feels hopelessly lost when he finds himself pitchforked into a class of forty. (I speak,

alas! from personal experience!) The difference between the experience gained in a small *école annexe* or a big *école d'application* is similar to that gained in a sham fight or in a real battle.*

Criticism.
Insufficient
Training.

On the question of whether teachers are sufficiently trained in the *école normale* I encountered some somewhat severe criticism.† One inspector bluntly described the training as *nulle*. He was also dissatisfied with the theoretical knowledge of pedagogics the *élèves-maîtres* received, and ascribed it to the fact that the majority of directors are recruited from the higher normal schools, and so have never taught in a primary school, and are, therefore, often unaware of what is suitable in the way of methods, etc. If this is true, surely a stage of five years in the inspectorate as a necessary preliminary to becoming director would meet the objections of such criticism.

The reply.

In answer to these objections, it was pointed out to me that the main idea of the *école normale* was to educate the pupil teachers, and give them rather an orientation in teaching than a complete training. This was frankly recognised by the State refusing to allow anyone to present himself for the examination of fully certificated teacher still he has spent two years at least in a school as "probationer." I have already spoken of the searching nature of these examinations, not forgetting the case of the teacher who had taken eight years to pass the test, and so, whatever may be the exact value of the pedagogical training in the normal schools, there is no doubt it is very hard for a "real duffer" to qualify as a full teacher.

(e) RECREATION—ASSOCIATIONS OF FORMER PUPILS.

Libraries and
Museums.

All the schools I visited were supplied with excellent libraries, placed in rooms that were generally the best in the building. In two cases, at least, these rooms were used as common rooms by the professors. These libraries are not, as in some countries, guarded with all the precautions suitable to the surveillance of a powder magazine; on the contrary, the pupils are in many instances constrained to take out at least one book a week. At Loches I found the pupils read in the library every Saturday from 4.30 till 8. Their reading is superintended by the French professor, for whom they compose summaries of useful books or make extracts. It was at Loches, too, that I was shown a remarkable collection of fossils and antiquities found in the neighbourhood. The soil, being a *sable calcaire*, contains many curiosities, and especially chipped flints, some of which are more than a foot long.

* In the debate on the Budget, 1900, M. Gautret, in the Chamber of Deputies, demanded the total suppression of the *écoles annexes*, of which he pointed out "the uselessness and grave disadvantages from the point of view of the teaching of our *élèves-maîtres*." The Minister, in reply, observed, and after him M. Bayet, that the administration has suppressed these schools wherever it was practicable.

† It is worth noting that M. Bayet in the Rapport E.P. says (page xiv.), "Nous devons . . . fortifier encore l'apprentissage professionnel."

The same school possesses a good cabinet of natural history, with a collection of artificial manures and some curious models of the different varieties of pears which grow freely in that part of the country, but otherwise there were no agricultural specimens.

Apart from libraries, a good deal is done for the recreation of the pupils out of school hours. At Caen I came across a football team who had just carried off the "Association" championship of all Normandy. The pupils at Le Mans have also a team and a ground of their own to play on. At Loches the pupils have likewise started to play. The director was very favourable to the idea. He did not think the pupils took enough physical exercise. In this he resembled another French teacher who told me his colleagues had not yet learned to appreciate the full value of fresh air, a point in which, as far as my experience goes, I can in no way bear him out. I found the schools exceptionally well ventilated as a rule. But perhaps he was thinking of the winter. Anyhow, he added that a large number die of consumption, and to show the insufficiency of gymnastics without indoor sports, he stated that the teacher of gymnastics at the *école normale* had just died of consumption. Certainly a bad advertisement for gymnastics!

One school I visited had a stand of muskets, which it uses for military drill and for shooting. The precision of these weapons was somewhat defective, and hopes were entertained that next year the Minister of War would serve out a better weapon.

One school was just starting a band or *fanfare*. In another I found one in full blast. At Loches the director told me the pupils were very keen on their band. It seems a pity that the girls' schools do not yet appear to have gone in for forming orchestras like the men's colleges.

The men's college at Alençon possesses a *bassin de natation*, which consists of a horseshoe channel whose two ends communicate with the river. The depth varies from 2 ft. 8 in. to 10 ft., and photographs that were given me show that this open-air bath is well patronised in summer.

I was also shown at Loches a dark room for lovers of photography, whether masters or pupils.

At the same college the pupils of the first year are formed into a fire brigade. I saw them at practice, and they certainly worked with a will. They had already received their "baptism of fire" at a conflagration in the neighbourhood.

Several of the schools have associations of former pupils. That of the men's college at Le Mans has already 250 members, although only founded in 1893. There is a general meeting and banquet every year. The women's college in the same place has no regular association, but the library is open to former students, and meetings are held once a month. At Blois, the old boys' association numbers 336 members (academy inspectors' report for 1899), and gives a prize of forty francs for the best pupil in the third year. The women's college has also its association, with an annual *fête*, which takes place on the day of its general meeting.

(f) THE "BREVETS."

brevet
élémentaire.

The examination for the *brevet élémentaire*, the possession of which is obligatory for all candidates who aspire to enter the normal schools, is held by a commission appointed by the rector, and presided over by the academy inspector, who also superintends the examination for the *brevet supérieur*. The commission must contain two inspectors, two members of primary education, three heads of and two professors in the normal colleges and higher primary schools, and at least one member of the private schools; other representatives from public or private primary, secondary, or higher education are often added. Special examiners in agriculture, modern languages, gymnastics, singing, etc., are sometimes appointed. They have only a consultative voice in their particular subject. Candidates must be at least sixteen years of age. The subjects for the examinations are divided into three series.

- (a) (1) A dictation of about a page. (2) French composition. (3) An arithmetic question, and a problem, to be worked out and explained.
- (b) (1) A writing examination. (2) A piece of freehand drawing. (3) Elementary gymnastic exercises of the type common to the primary schools; for girls, gymnastics are replaced by sewing.
- (c) *Oral*. (1) Reading and explanation of points in the text. (2) Questions in arithmetic. (3) Questions on natural history, and civic instruction with geography of France. (4) Elementary questions and exercises in sol-fa. (5) Elementary notions of physics and natural science, and agricultural education.

brevet
supérieur.

The *brevet supérieur* is now practically the leaving examination of the *école normale*. Candidates must be 18 years of age. The examination is reputed difficult. The pupils, however, show up well in it. In Sarthe, in 1898, out of 12 male candidates 10 passed. In June, 1898, in Orne, 9 out of 11 male pupils and 8 out of 11 female pupils satisfied the examiners, and two women redeemed their failure next session. The men's college at Caen sent in 22 in 1897, who all got through! and the women's college had 18 out of 20 successful candidates. In Indre-et-Loire for 1897, 12 out of 13 "aspirantes" passed. In Loir-et-Cher, in 1898, 13 men presented themselves and 12 passed, and all the women candidates were "received." The average percentage of passes for all candidates is far lower. Thus while in Indre-et-Loire 12 out of 13 women from the *école normale* passed, the successful candidates for the whole department totalled only 32 out of 58, and as 10 of these were from the men's college, assuming that 8, a low percentage, passed, only 12 out of 35 of the outside examinees passed, or something like 34 per cent., against over 90 per cent. for the normal colleges.

The examination consists of two series:—

- A. (1) A paper which contains a problem in arithmetic (with

a geometrical question applied to practical operations for men only), and a composition on physics and natural science, with their application to hygiene, industry, agriculture, and horticulture (time given, 4 hours). (2) A French composition (literary or moral), (3 hours). (3) A composition in drawing, with model in relief (3 hours). (4) A paper in modern languages, consisting of an exercise and a piece of translation (dictionary allowed) (3 hours).

B. This includes *visé voce* in *la morale*, education, French, geography and history of France, with notions of geography in general, arithmetic, book-keeping (with elementary notions in algebra, geometry, and land surveying, for men only), notions of physics and chemistry (with notions on agriculture and horticulture, for men only). Translation at sight from a modern language. It is noteworthy that agricultural science is obligatory as a written subject in both these examinations, and counts in them. It is probable it will not be long before it is placed on the same footing in the examination for the *certificat d'études*.

(g) TWO QUESTIONS.

One of the points under discussion to-day is the question of suppressing some of the departmental colleges and substituting in their place regional schools.* Apart from economic reasons the chief arguments in favour of such a change seems to be the small number of pupils in some of the smaller departmental schools, which deprives the pupils of the many advantages that are attached to schools whose numbers are bigger. The difficulties, however, of effecting an alteration are undoubtedly great. The departments who have made such sacrifices in the way of building are little likely to consent to seeing the school given up, and the local tradesmen in the smaller towns will probably also oppose the change. As far as one can judge, the departmental college has come to stay, and, as has already been pointed out, it falls in well with the local sympathies of the teachers themselves. Centralised schools might give them wider ideas, but perhaps at the cost of much local patriotism, which is after all a very desirable thing. I spoke to several officials about the proposed fusion. One directress expressed herself in favour of fusion when the normal schools were very small, but did not think it was realisable on a large scale. Others looked on the thing as impracticable. One point which was not brought out, but which seems to me to tell in favour of the present system, is that the academy inspector would be far less directly interested in the normal school than he is. At present he naturally takes the liveliest interest in what is virtually the nursery of his teaching staff. He would not have so great an inducement to exercise the same

Regional
departmental
colleges.

* Alpes Maritimes sends its female pupils to the normal school of another department, the territory of Belfort does the same. Gers and Vauchuse have also merged their schools with those of two other departments. Basses-Alpes and Hautes Pyrénées have been authorised to join Gers and Vauchuse.

close and paternal oversight over pupils who are "here to-day and gone to-morrow." And what the pupils might gain in superiority of training at the regional college they would lose in the continuity of influence to which they are at present subjected. The best remedy for the paucity of numbers in some of the normal schools is to adopt the suggestion of M. Jost that all teachers should be trained. At present only seven-tenths of the male teachers and six-tenths of the female have been through the schools. If normal training were made compulsory, it would thus raise the average of those on the books by thirty per cent., although it is only fair to point out that in the departments I visited the number of pupils in the normal schools was, as a rule, sufficient for the demands of the departments. That some such measure is desirable is clearly the opinion of the writers of the Report on Primary Education in dealing with the normal schools, where it is stated that the insufficiency of money voted for education has prevented the Administration from keeping up the effective in the normal schools, and compelled it to its great regret to maintain the service in the great majority of departments by enlisting masters who, not coming from the *écoles normales* are evidently less well prepared. This constituted a serious danger, for on the value of the masters depends the value of the schools, and, if care were not taken, the whole of primary education might suffer under this heading a grievous loss. The Report goes on to say that, in consequence, the Administration has asked Parliament for more money, in order to keep the normal schools up to their proper pitch.

But behind the question of regional or departmental colleges lurks a question quite as difficult, that of a different form of training for town and country teachers. In the discussion on different curricula for urban and rural schools, it has been already pointed out that the differentiation of the teachers would be its necessary corollary. Such a differentiation if introduced into departmental colleges, would necessitate a bifurcation into two sides, with an increase in the staff and an augmentation of the teaching expenses which already amount to £20 a head. One proposition that was suggested to me by a high official was that there should be two types of colleges, one departmental, for country teachers, and the other regional, for the higher teachers who would go to the towns. This, however, would further depopulate the departmental colleges. To obviate this drawback, it might be suggested as an improvement that the departments in the same university area should combine, in order to adopt the *école normale* in the university town for a town teachers' training college, and divide up the balance of country pupils of this particular department among the normal schools of the other departments, which would thus become strictly rural. Some of the advantages of the paternal supervision alluded to above would be lost, but a considerable gain might be effected by bringing about a *rapprochement* between the departmental university and the normal school for

teachers, which would be highly beneficial to both. The best pupils in the normal schools would thus have the chance to earn a university degree, and the university in adapting its programme to include these new comers would only be fulfilling its ideal of being truly universal. Nor would the education of the country teachers be neglected either. On the contrary, they would benefit by a programme more suited to their needs, interpreted by professors thoroughly equipped for country teaching, for such a change would ultimately prolong the cleavage into the *écoles normales primaires supérieures*, and oblige them to prepare professors for the rural normal schools. Such a method of re-arrangement would lead to a minimum of dislocation, and prevent the disfranchisement of any town that has hitherto possessed a departmental college.

Differentiation on such lines would naturally tend to sunder the teachers into two classes. Probably the teachers would oppose it on this account. But it may be pointed out that in secondary, and still more in higher education, differentiation is the law, and not the exception. Only governesses, or other educational *bonnes à tout-faire*, can now profess to explain the universe to the mind of the small child. Anyone who aspires to teach in a good secondary school, at any rate in France, has to make up his mind at the latest at the beginning of his university career whether he will be a classical, science, or modern language teacher. It is only in England, in a certain number of unfortunate subjects which anybody is supposed to be able to teach at a pinch, there is still any latitude of choice. Why then should it be any greater hardship to primary teachers to split them, not into three or four classes, as in secondary education, but only into two, and make them decide at the outset whether they will qualify for a town or country curriculum? Nor would the bar in this case be so formidable an obstacle to get over, as in the higher grades of the profession. There might well be extra examinations in the parts of the whole curriculum peculiar to each, such as science applied to agriculture for the country, or industrial training for the town, with a certificate for either section, which would enable a teacher who had already adopted one type of teaching to qualify, if he wished, for both sorts of schools on the register.

If the French teachers have sufficient energy and industry to prepare for the exceedingly severe examination for the inspectorate, they will find the passing of such examinations not very arduous. The only real danger of such a scheme is the fear that people might tend to regard the position of the country teacher as inferior to that of the urban. But as long as the practical equality of salaries were preserved between the two teachers, the equality in teaching capacity between the two would be likewise maintained. But in England, where salaries are all "at sixes and sevens," this feeling about the inferiority of the country teacher, which already exists to a large extent in a confused state, would be focussed as soon as the differentiation became an accomplished fact. The "ear-marking" of the grants for salaries seems to be the only remedy, were the differentiation

adopted. This would involve the fixing for teachers, who are on "the strength," that is, the certificated teachers, a certain "living" wage below which it would be impossible to descend. Enterprising school boards or liberal school managers might, "of their very great bounty," go higher if they pleased. But if we had some equality in salaries between town and country (not merely apparent, but proportional to the cost of living) we should probably have something like uniformity of capacity between the two categories of teachers, and there would be no chance in the future of the country being regarded as a sort of dumping ground for the duller type of teachers. The country teacher might, and would, be probably different from the town teacher, but in his own line he would be the latter's equal. But we in England are not so far advanced as the French for trying the problem. Apart from the question of uniformity of salaries come the long string of grievances connected with housing, water supply, drainage, etc., which are all bound up with the question of the teacher's comfort, and go far towards influencing him in favour of a town rather than a country life, not to mention the delicate question of the social status of the English primary teacher in the village, which is not so good as that of his French colleague, not because there may be anything to choose between them, but because the social organisation in the two countries is not the same, and the French teacher fits the more easily of the two into the *milieu* he finds himself in. And lastly there is the crying need of more training colleges. The average French department is about the size of the mean between Devon and Norfolk; Indre-et-Loire, the 43rd department, in point of size, contains about 1,520,677 acres, against Devon, 1,650,705; and Norfolk, 1,291,170. The departments vary, however, comparatively little. Calvados, which comes 60th, has 569,200 hectares, and Loir-et-Cher, which comes 31st, has 642,000 hectares, which makes a difference of only about 180,000 acres, an area less than the size of Huntingdonshire. It comes, therefore, to this, that if England were as well supplied as France in training colleges, we should have about two at least in areas a little bigger than Norfolk, but as the population is much denser in England than in France, the unit, if decided by population, would be much smaller. In France (excluding Algeria) there are 168 training colleges (85 for men and 83 for women). The population of France (1896) was 38,517,975. This works out at one training college for every 229,273 inhabitants. On the average, even such a comparatively rural part of England as Norfolk would be well entitled to two colleges (population over 460,000 in 1891). In England and Wales there were, in 1899, 58 training colleges (44 residential and 14 day training colleges). This works out on the 1891 census figures (29,002,525) at one residential college to something over every 650,000 inhabitants, or, reckoning in the day training colleges, one training college to a little over every 500,000. Were England and Wales provided with training colleges on the same scale as France,

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we should have about 127, instead of 58. But the average of students in a French training college is 41 (1892); in England and Wales it is just under 82 (1899). So the actual figures of colleges are not so bad as they look. Perhaps, however, one of the best points of comparison is the number of students in training. In England and Wales they amounted to 4,750 (1899), and in France to 7,736 (1897). But of these English and Welsh students only 3,700 were residential, while all the French ones were "in college." Another index of the lack of training in England and Wales is the percentage of candidates who passed the Queen's Scholarship Examination in 1899 and were admitted to training colleges. In all 26·9 per cent. were admitted to training colleges—day and residential—of which total only 19·8 entered the residential colleges, and most of these will go into town schools; whereas the number of teachers in training in France to-day is probably nearer 60 than 50 per cent. of the whole number who enter the profession, and most of these will go into town schools. If people wish to have really satisfactory rural education they must insist on having normal schools for teachers to attend. When the day comes for their building, if it ever does, they must further look out that if some of them are not reserved for preparing rural teachers, they should have at least sides attached to them for training the latter. Were education a county matter instead of being locally a sort of Thuringia of isolated petty authorities, the day for such reforms might not be so far distant.

The French, on the other hand, might well make some sort of experiment in differentiation. As has been already pointed out, the ground is comparatively clear, and with their faculty for tackling administrative problems they would easily schedule the areas which should give a rural or a town education, and draw up two maxima programmes for each section. They could leave it to their excellent academy inspectors to decide not only what would best suit some school on the dividing line, but also allow them to modify either of the main programmes in accordance with local needs. It would not be necessary to subject all the schools of France to the experiment. The authorities could take as a unit one of the university areas, and carry out at a comparatively little trouble and expense an experiment of capital importance not only to France, but to all civilised countries.

If France
tried it.

APPENDIX ON PROFESSORS OF AGRICULTURE.

The departmental chairs of agriculture were created by the law of the Department of 16th June, 1879. Candidates for the post of professor of agriculture in any department must present themselves before an examining board consisting of agricultural and educational experts. The examination takes place at the *chef-lieu* of the department, and the subjects embrace agriculture, viticulture, forestry and horticulture in their application to the department. The examination is threefold. There is written composition, and an oral and practical examination.

The professor is paid partly by the Ministry of Agriculture and partly by the Ministry of Public Instruction. His travelling expenses are defrayed by the department. There are four classes; the top class receive 4,500 francs a year, and the lowest 3,000. Their official duties, which resemble in some respects those of an organising secretary to a county council technical committee, comprise, among other things, agricultural teaching in the normal colleges for three hours a week, and the organisation of popular conferences on agriculture. The number of the latter is fixed at twenty-six a year. They are also required by the authorities to furnish any statistical information that may be required.

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professors.

The special professors of agriculture, also known as agricultural professors for arrondissements, are likewise chosen by a competitive examination. They, too, are divided into four classes; the top class, which can never contain more than 10 per cent. of the effective number, receive 3,400 francs, and the lowest only 2,400. Their duties, with the exception of teaching in the normal colleges, are practically the same as those of the departmental professors. They depend on the prefects or sub-prefects, to whom they are bound to furnish every year certain statistics and reports. They are further placed under the control and inspection of the departmental professors, as far as the organisation, surveillance, and conduct of *champs d'expérience* or *de démonstration* are concerned. It seems, however, it would be better if they were placed directly under the departmental professor. The latter has often need of adjoint or secretary, which the Ministry cannot see their way to supply. As it is, in a busy department the chief professor has almost too much to do, yet he has no claims over his subordinates, who generally go their own way, with the result of a certain loss in co-ordination in effort and direction as far as the department is concerned.

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The teachers are of great assistance in helping them to organise conferences, and bringing their own pupils to listen. In fact, one teacher seemed to think that he and his class formed the business part of the meeting. The aid the teachers also render in the creation and superintendence of *champs de démonstration* has already been noticed. The funds for these experiments are found by the department, which provides a certain credit for the purchase of *engrais*. The large artificial manure companies also place a certain amount of their products at the disposal of the departmental professor, in order to popularise their use among the peasants. In fact, one of the professors I met is energetic enough to run a store merely to promote the employment of *engrais*, which he buys in bulk. The utility of this increased use of *engrais* is to be seen in the improvement in the corn crops. Round Beaumont, in Sarthe, a local corn merchant told me the yield had been almost doubled. The teachers have also lent a helping hand in the great crusade in favour of the re-plantation of the vine which is going on everywhere, and their services in promoting the best methods of grafting have been already recognised. It seems a pity that the professors should appear a little jealous of the teachers in some departments, considering the latter are in many ways the best intermediaries they have.

Another point in which the professors of agriculture do no little good is to break down certain bad habits which have grown up, as, for instance, faulty rotation of crops, such as raising two successive corn crops, a very common practice, or inferior modes of cultivation. *Apropos* of the latter, the departmental professor told me in Sarthe he had all the pains in the world to get the peasants to give up the system of planting their potatoes in rows, too wide apart, their system being to plant them more than 3ft. 4in. apart, and at a foot or 16 in. from each other. Again, the professors have proved especially useful in times of drought or difficult seasons, in advising farmers what to plant. In fact, one of their most important duties is to give consultations gratis on market days to the peasants on any knotty point, or even to attend markets for that purpose. In connection with this should be mentioned the services they render in analysing soils or suspicious artificial manures that do not appear to be up to standard, as in Loir-

et-Cher, have very fine laboratories at their disposal. Their duties in the agricultural examination for schools have been already touched on. They also take a leading part in the conduct of agricultural shows, the formation of syndicates for the purchase of manures, bulls, etc., or the creation of mutual assurance societies against loss of cattle or hail. What spare time they have left they devote to agricultural research, generally in connection with some question that interests the department. M. Cassarini, the professor in Sarthe, gave me quite a bundle of scientific investigations he has published. In spite of this, there still exists in some departments a distinct opposition to the departmental professors, which is made up of rather conservative farmers and proprietors of the old school. They consider practical agriculture sufficient, and think it adequately encouraged by agricultural shows, and look on experiments in manures and popular conferences as little better than a fad. Happily, as the departmental professor in Sarthe hints in his summary of field experiments, these opinions are not widely shared by the rising generation.

A refractory element.

As we have seen, the departmental professors are under the condominium of the Ministry of Agriculture and the Ministry of Public Instruction. I asked several persons interested in agricultural education whether the present system was the best or not. The following are roughly the chief pros and cons.

Pros and cons on the condominium

From the strictly educational standpoint it seemed rather a disadvantage, especially for the *écoles normales*. The departmental professor is a very busy man, and having so many irons in the fire, he is not always able to do justice to his educational duties at the training colleges. Sometimes, too, he is a man more interested in experiments and research, and looks on teaching callow youths as rather drudgery.

On the other hand, it was pointed out that the most important part of his work lay with the farmers, and the education of adults. Were he placed under the Ministry of Public Instruction, this side of his duties would suffer, and were his present duties divided in two and given to a professor under each Ministry, there would not only be a danger of the work at the normal school becoming too theoretical, through the teacher losing his present close contact with agriculture (it was a teacher who urged this!) but also as the *élèves-maîtres* at the normal schools are destined one day to become his "right hand" men in the villages, it is only proper he should have a hand in their bringing up. What does want doing, is to see that the first call the director of the *école normale* has on his services is rendered possible by affording him outside assistance from the special professors of agriculture, where it is practicable, and in seeing that in all cases the science taught in the normal schools bears directly on agriculture.

CHAPTER IX.—CONTINUATION OF RURAL EDUCATION (DAY).

(1) SECONDARY EDUCATION.

What is the future of the clever boy in the elementary schools in rural districts? One chance for him is to enter the *collège* or *lycée* in the country town by means of a scholarship. At Caen I was told the Ministry had given the head of the *lycée* a thousand francs to disburse in this fashion, and that ten or twelve boys, mainly out of the primary schools, had been thus attracted to the secondary school. Whether this is altogether an advantage for the sons of poorer parents may be rather doubtful. The disadvantage under which French grammar schools, or at least those in the smaller towns, labour is that they are compelled to adopt the ambitious

The lycée and collège.

Attempt to
water for local
needs.

programme, with its course of studies arranged for boys who will stay on till eighteen or nineteen, which does very well for the big Paris schools, but is ill adapted for country schools, where the leaving age is probably nearer sixteen. What is wanted in these schools, as M. Ribot's Commission has already pointed out, is the establishment of a shorter secondary programme to finish at sixteen. Again, the whole tendency of such schools is to give an education that prepares for the liberal professions or the civil service. The child of poor parents is unable to study for the former owing to his lack of means; his chief hope, therefore, is to enter the ranks of an already over-crowded administration. It is only fair, however, to state that several of these schools are making efforts to bring themselves more into relation with rural needs. An hour a week in the theory of agriculture is given at the secondary school at Caen by the departmental professor. I heard of a similar practice at the college at Argentan. A professor of agriculture told me, also, of a theoretical course he started in a *lycée*. At first he had only five or six pupils, but the class gradually rose to thirty. Unfortunately, they were not a very brilliant lot. All the "ne'er-do-wells" of the school had been shunted into the class, a practice not unknown in English schools. After a three years' trial the professor gave up the class, which was not surprising, as there was no remuneration. This gratuitous instruction is not the rule in all the Departments; in some such teaching is paid either by the State or the *Conseil Général*.

The following passage from a paper read by M. René Leblanc, the well-known authority on agricultural education, at the Sixth International Congress, held at Paris during 1900, confirms and completes in a curious manner the above remarks:—

The pupils admitted to the agricultural course belong most often to the classes of the modern side. Their ages vary as their aptitudes. Their knowledge of physics and natural science is also as little homogeneous as the class itself, and is rarely in accord with the agricultural notions which are the subject of the course. The latter is the object of no public test (*sanction*), and its results are in general but little appreciable. This summary organisation is only therefore an appeal for a rural *clientèle*; in order to be really alive, it ought to be completely and profoundly modified in the direction indicated by the *enseignement primaire supérieur*.

Other efforts.

A more promising departure in the light of rural needs is the creation of a school with an industrial or agricultural crown or side, a type of which I was told exists at Flers, a country town in Orne, of considerable industrial activity. The course must be a serious one, for boys remain in some cases till eighteen. I hope I am betraying no secret in stating that the academy inspector for Orne is already thinking of trying to establish an agricultural section at Domfront, in the college there. In order to make it sufficiently practical he proposes to link it on to the *ferme école* of Saint-Gautier in the neighbourhood. It is true the section would be rather for the sons of the better to do peasant proprietors, but that is just the class who require such a training. Good country secondary education is as necessary in France as elsewhere. It

was in Orne, again, that I heard of a wealthy Frenchman domiciled in Moscow who had offered to found an agricultural chair in the college of his native town of Sées.

(2) THE COURS COMPLÉMENTAIRE.

But the most natural outlet for the clever boy who wishes to continue his studies is the *cours complémentaire*, the *école primaire supérieure*, or the *école professionnelle*. The admirable monograph of Mr. Morant on the French system of higher primary schools renders superfluous any detailed explanation of these schools. An attempt will only be made to describe the agricultural education given in these establishments, together with certain points which it will be necessary to repeat or complete in order to render the aim of the schools intelligible. Such, for instance, is the distinction which has gradually been growing up between these various types, dictated by the desire to render the aim of each as clear as possible, in order to establish the schools, each on its own particular basis, with the result that to-day the function of each of these types is carefully defined, and the differentiation between the *cours complémentaire* and the *école primaire supérieure* is quite as clear cut as that between the *école primaire supérieure* and the *école professionnelle*.

To take the first distinction. The *cours complémentaire* is only an *annexe* to the elementary school; the *école primaire supérieure* is a separate establishment, although in one school I came across a sort of *cours préparatoire* was attached to it. In this way the *cours complémentaire* recalls in organisation our higher grade schools, which have always had elementary classes attached to them, and are rather an outgrowth of the primary system than a distinct offshoot. There is, again, a difference in the curriculum between the *cours complémentaire* and the *école primaire supérieure*. In the *cours complémentaire* it is only a year, according to the official report, though at Caen it is spread over two, according to the academy inspector's report for 1897. The duration, again, must be at least two in the higher primary school. The staffs in the two establishments are not on the same footing. In the *cours complémentaire* the master is an *instituteur*, with the *brevet supérieur* appointed by the Prefect; in the *école primaire supérieure* he is a professor and nominated by the Ministry.

A *cours complémentaire* cannot be created in a school that has not a *cours supérieur*, so careful are the French of preserving the idea of standard in education. In addition, the commune in which the school is situated must engage to pay for the usual cost of keeping up the class-room, etc., for a minimum period of five years.

If the *cours* falls below twelve pupils for three consecutive years the State can close it. A very interesting point is that there is no general programme. It is laid down that the head of the school, with the master of the class, should draw up the curriculum—(1) according to the intellectual level of the pupils; (2) in

True continuation of primary education.

Difference between *cours complémentaire* and *école primaire supérieure*.

Rules for its creation.

Above all no (fixed) programme.

accordance with the local needs of the district. The programme must be approved by the primary inspector and endorsed by the academy inspector. There is the inevitable examination at the end.

To prevent any tampering with the standard, no pupil can enter the *cours complémentaire* who has not passed the *certificat d'études* and spent at least a year in the *cours supérieur*. There are now no scholarships attached to these classes. Those which were previously given have now been transferred to the *écoles primaires supérieures*, as the Ministry has decided these classes are local and not regional, as was held at the time Mr. Morant wrote.

One or two specimens.

The *cours complémentaire* are naturally confined to the towns. In Calvados, in 1897-8 they amounted to four, with 106 pupils. I did not visit those in Caen, because there was no agriculture taught, and the whole of the teaching was commercial and industrial. In Orne I came across one at Trun,* which was also a boarding school with accommodation for thirty boarders, the actual numbers being twenty-three. The pupils paid 400 francs a year, and their ages varied from twelve to sixteen. Most of them came out of the communes round, and were the sons of the better class peasants. The teacher was keen on agricultural education, and had a *champ d'expérience*, which has already been mentioned. The pupils were certainly well looked after. There were military exercises and gymnastics in school, and football was played on the fine open green in front. Then there was a *tir scolaire*, and a small orchestra as well. Altogether the school seemed flourishing, and from what I heard outside, the agricultural teaching is very sound. I also came across a *cours complémentaire* at Mayet, in Sarthe. Here there were thirty-four boys in the top class, twelve of whom possessed the *certificat*. The teacher had one boarder. The fees were only 350 francs a year, but the teacher was public-spirited enough to wish to take *pensionnaires* in order to raise the status of his school, as day boys rarely remain after passing the *certificat*. I have already described the highly successful agricultural experiments of this teacher in another place.

(3) HIGHER PRIMARY SCHOOLS.

What is Higher Primary Education?

Higher primary education in France is not an "unhappy counterfeit of secondary education; the higher primary school is not a degenerate college but a perfected school."† "Higher primary instruction is recognisable at once from its character, which is frankly utilitarian and practical; in this general sense it is professional." Nevertheless it is "a veritable instruction; it is not to be confounded with apprenticeship. It is a school, not a workshop."† It is destined "to continue the work of education commenced in the primary school, and to favour that culture of mind which forms the judgment, the heart, the

* The headmaster assured me he had a *cours complémentaire* and was preparing three boys for the *brevet*. His school does not seem, however, to have been so far officially recognised as containing a regular *cours complémentaire*. (See "Annuaire de l'Enseignement, 1900.")

† See Rapport E. P., pp. 350, 351, 355.

will, the character."* Yet in the second or third year these schools can specialise in agriculture, industry, or commerce to a certain extent, the general parts of the programme being reduced to allow of these alternatives. In the other primary schools and even in the *cours complémentaires*, *cours accessoires* can be created by the Ministry for preparation in the same special subjects.

The programmes, which in their present form date from 1893, include *la morale* and civics, French literature and language, history and geography, common law, and one modern language. In mathematics the professors are particularly enjoined to take their problems from industry, commerce, and agriculture; book-keeping is also taught. Physics and chemistry are specially directed towards agriculture, and science in general is always rendered as practical as possible. Thus in chemistry, should the subject be phosphorus, the professor passes rapidly over the history of its discovery and the methods of its preparation; he takes only passing note of the three phosphoric acids and their reactions from the analytical point of view. On the contrary, he insists on the natural phosphates, deposits of which are indicated in geology or geography, on the super phosphates, etc. The botanical garden has always a part to play in the teaching of science. Some schools content themselves with a dried and dusty herbarium, which, merely containing mummified specimens of plants, can never give an adequate idea of their life and surroundings. As the Report on Primary Education says, what is wanted is a garden, or rather section in a garden, in which are grouped not the rarities of the region, but the plants the pupils ought to know, whether with a view to cultivation or extirpation. Not one plant alone, but several specimens ought to be cultivated of the most characteristic plants, in order that the professor can distribute samples of them to the pupils during the lesson. The *promenades scolaires* are everywhere utilised for making collections of plants and minerals. In order to bring home to the pupils the importance of studying and understanding the nature of the soil, the General Inspection has proposed the display in a prominent place in the schools of a geological map of the department, with indications of its characteristic fossils.

A theoretical course of agriculture is given in all three years of the general section at the rate of an hour a week, while three hours are allotted for the agricultural section. It is confided sometimes to a special professor who depends on the Ministry of Agriculture, and sometimes to the master who teaches science and possesses a certificate for teaching agriculture. I came across teachers of the two types. At Mamers Higher Primary School the one hour a week is given by the agricultural professor of the *arrondissement*, while at Amboise, in Indre-et-Loire, a member of the staff teaches agriculture. As regards the value of the hour a week of theoretical training, the majority of persons I met did not rate it very high. They all

The programme. Science and its application to agriculture.

Agriculture Theoretical teaching.

* See Rapport E. P., pp. 350, 351, 355.

recognised that it is difficult to make progress in a subject which is only taught for one hour a week, and above all they regretted the absence of any practical work to illustrate and bring home to the pupils the real meaning of this theoretical instruction.

The need of a close connection between the science and agricultural teaching, when in different hands, was strongly insisted on by the Ministry in a circular and set of official instructions issued in 1898. It is here obviously a case of seeing that one waters where another has planted. Of course in a school like Ambroise, where the two subjects are taught by a single person, the danger does not exist.

Practical
work.

In the agricultural section six hours a week are given to practical work according to the official programme. This is divided into two groups, outdoor work during the fine season, and indoor work during the winter, or on rainy days. A portion of the latter time is passed in the workshops, where the pupils learn a certain amount of mending and repairing. The rest of the indoor work consists of chemical experiments relating to the constitution of soils, of manures, and the analysis of milk, etc.; putting together and taking to pieces agricultural implements, observations on cattle, as regards the feeding and fattening, etc. "All these practical demonstrations are an indispensable complement to the theoretical lessons if one wishes the outdoor work to be performed with intelligence."

The outdoor work comprises all operations in the garden and the *champ de démonstration*. However, if the surface to be cultivated is considerable, the tillage is executed by a neighbouring farmer, the school only possessing the usual tools for manual labour. The practical work of the pupils consists in dividing up and measuring the land, the preparation, weighing, and spreading of manure and sowing of seeds, hoeing and light work, and lastly harvesting, threshing, weighing, or other operations for calculating the yield, for establishing the prime cost, and the balance between the crop gathered and the manure to be returned to the soil.

The garden work consists principally of market gardening and fruit culture, and comprises pruning and grafting, in winter indoor grafting for the vine, the training of fruit trees, and finally the keeping in order of clumps of trees, and the preparation of flower beds. Some schools have a poultry yard, a rabbit hutch, and even a cowstall; often also a well kept set of hives, and sometimes a small silkworm nursery.

The programme of practical work is completed by visits to nurseries, gardens, farms, fairs and markets. Every pupil is obliged to write a descriptive account of each visit, which is afterwards carefully corrected by the professor.*

Examina-
tion.

The *école primaire supérieure* has its terminal examination, as most other grades of French education. The general part of the

* The above paragraphs on agricultural teaching are a reproduction in a shortened form of the account given in the Report on Primary Education.

examination includes a "moral" and a "French" essay, as well as a question in science and drawing. It is perhaps worth noticing that for pupils who have specialised in agriculture the special examination is divided into three parts—written, oral, and practical. The written lasts two hours, and is devoted to two questions, one taken from the theory of agriculture as taught in the school, and the other treating of some practical question. In the oral examination, the length of which must not exceed more than an hour for each candidate, there is an interrogation in general history and geography, agriculture, and questions on the physics and natural science that bear on the subject, an interrogation on arithmetic and geometry applied to land measurement and the work of farming; an interrogation on the notions of book keeping, common law, and political economy. The practical examination is limited to one or more of the exercises specified in the programme of practical indoor and outdoor work. Candidates have also to pass in singing and gymnastics. At present certain *lycées* and *collèges* prepare pupils for the examination. The International Congress proposed to change the title from *certificat* to *diplôme de fin d'études*. M. Doliyeux, who comments on this in his report of the International Primary Congress, is unable to explain the proposition. It cannot mean to confine the leaving examination to the higher primary schools, for this would be to shut out the *collèges* and *lycées*. *Cruelle énigme!*

Of the three *écoles supérieures* that I visited, that of Loué in Sarthe is probably well known for the splendid display it made at the Exhibition of the experiments which had been executed to illustrate the different effects of varying manure combinations on wheat. The school itself lies about twenty miles from Le Mans, as the crow flies, and is linked to the departmental metropolis by one of the numerous light railways which have done so much for the prosperity of the department and its shareholders.

The schools
visited.

I was present at one lesson in the *classe préparatoire* on agriculture, which was rather disappointing. The subject was the feeding of cows, and the answers struck me as rather bookish and stereotyped. There was some hesitation when I asked what was the principal breed of cattle in the neighbourhood, and this was repeated when I enquired after the principal crops. The same uncertainty was manifested when I asked if it was a good or bad season for farmers. These questions were not, of course, strictly science applied to agriculture, but I deliberately put them in order to see to what extent the subject was real to the children, and if the scientific training of the school added a zest towards keeping up in the actualities of the subject. By a question on the composition of the soil I learnt that it was calcareous, as the teacher pointed out the full name of the town was Loué en Champagne. Hence the cattle have large bones, and a certain amount of barley is grown, a large portion of which finds its way to England. There

were thirty-three children in the class, the copies were neat and the writing was good. In the *classe des petits* there were two divisions, and the top boy was six. I omitted to ask if these lower classes were regarded as a separate school, or only a sort of preparatory section, such as is allowed according to the official report. The bigger boys were having a gymnastic lesson, so the upper school was empty. The agricultural teaching in these classes is evidently very thorough. The teacher has made a selection from the agricultural programme of the Ministry, and illustrated it by a series of agricultural and geological tables, which are remarkable for their clearness and continuity. One shows the experiments proper to the introduction of agricultural teaching, the second experiments in agriculture performed in the school garden, and the third the results of the experiments in the *champ d'expérience* in '94-95 and '95-96. The latter, which contains 4½ acres, had not been such a success this year owing to the drought. To attract passers-by and give them a clear notion of what is being attempted, there are large notice boards stating results and the rotation adopted. The latter seems particularly useful, as the peasants have a bad habit of sowing barley after wheat, which exhausts the land.

Champ
d'expé-rien-
ce.

School
garden.

The teacher has a large garden, but, unhappily, as in many calcareous districts, the water supply is deficient. He told me he was quite comfortable, and had no desire to move. The only complaint he had was that the children came to him sometimes insufficiently prepared. From the reputation the school has in the country there is no doubt it is doing good work. The fees were very low: £16 a year for boarders and £8 for day boarders.

Amboise

There seemed to be no agricultural section in the higher primary school at Tours, so I did not visit it. On the other hand, at Amboise I was fortunate enough to hunt down the professor of agriculture at the higher primary school, and spent a very pleasant and profitable Sunday with him at the house of his father-in-law—a small proprietor, whose hospitality and conversation I much enjoyed, especially as he had all the strong common-sense and shrewdness of his class. Amboise is one of the comparatively rare schools in which there is an agricultural section. It is, however, small, and contains only ten pupils out of a total of seventy-five, the industrial section being the largest. The professor gives five hours a week in agricultural teaching, and of these three are common to all sections. The pupils lend a hand in the cultivation of the *champ d'expérience*, which is provided by the town. They sow, hoe, and learn to sharpen tools. They practice pruning and grafting—the vine is the chief cultivation of the department. The professor holds the diploma of *maître greffeur*, and is proud of it. The professor follows the official programme, and lays special stress on the species of cultivation in vogue in the department. The school has taken part in the School Exhibitions already alluded to, and on one occasion exhibited some wheat in the straw,

the yield of which, on a plot of four *ares*, or a tenth of an acre, was at the rate of sixty hectolitres an hectare, or about sixty-seven bushels an acre. The plot, it will be seen, was rather a small one. The professor, however, admitted this, and very sensibly remarked that the real question was how to use the *engrais*. First, there was the difficulty of seasons, and a good deal depended on the exact nature of the soil. The latter could be decided by analysis, but there was no control over the seasons, although they are probably less trying in that part of France than with us.

The third higher primary school I visited was the well-known Onzain, establishment of Onzain. The school was started by the *conseil général* of the department of Loir-et-Cher in 1881, in a former private boarding school, and as one of the first *école primaire supérieure* of the new type to be created, it has served, to a certain extent, as a model for others. There are boarders and day boys. The boarders pay 510 francs a year for everything, and the teaching costs the State another 500 francs more, so that the net cost is almost exactly the same as that of a pupil at the normal schools. The school had once forty-five State scholars, but since then, with the creation of other schools, the number has been reduced to five. The numbers in the school went down for a short period in consequence, but the school has already recovered its former prosperity. The discipline dispenses with detention, and few impositions are set. There are two *surveillants*, but each professor is supposed to spend three to four hours a day out of the school with the boys during recreation. As regards religious instruction, the director leaves it to the parents to decide whether they wish their children to be prepared for their first communion or not. The average age of the pupils is fifteen to sixteen. There is a preliminary class for those who have not obtained the *certificat*. This is useful, as it prevents the children from being snapt up by the *établissements religieux*. The director, M. Crocheton, informed me he was not troubled by boys leaving early, as the programme is *concentrique*. The full school course is, however, three years.

The director also kindly showed me over the school and grounds. He took me into the garden where experiments were being conducted with wheat, barley, oats, and potatoes. The results were very conclusive. The *témoin* and the patch without nitrate were a long way behind the others. The rye, unfortunately, had been ruined by a storm. Another excellent experiment was a nursery of all kinds of vines, in order to show which did best in the district. This is one of the few spots which the phylloxera has not yet invaded, though I was witness of some of its ravages at no very great distance. There were no sections in the school. The director does not believe in sections. "It is like having a foot in one Ministry and the other in another, and one has no firm foothold." He attempts to diversify the instruction according to the tastes of the pupils. Great stress is laid on the practical side of agricultural teaching. Pupils are frequently taken into the garden to watch

the results of the experiments they are conducting. They are also initiated into grafting and pruning. *Travaux manuels* and gymnastics are likewise a feature in the school work.

To increase
the supply of
higher pri-
mary schools.

(1) The neces-
sity of close
sympathy
with local
needs.

Class dis-
tinctions.
Should they
be recog-
nised?

Paying
classes.

I did not visit any higher primary schools in Calvados, for there were none to visit. The existence of a number of little local colleges has prevented their creation. The advantages of the two branches of education, primary and secondary, being under a single head are thus strikingly illustrated, though perhaps this desire to prevent overlapping and fear of injuring the little local grammar school has been pushed too far, to the profit of the religious secondary schools, which, with a perfectly elastic programme, are open to cater for all and sundry, and to fall in with the every desire the parents may express. It must not be thought, however, that the opening of higher primary schools everywhere would prove a universal attraction. There are two factors in the question. The first point is the necessity of bringing the curriculum still more into sympathy with local needs. This should not, however, prove very difficult. As the resolutions of the International Congress on primary education, which deal with this subject, point out, all that is wanted is, while preserving the official programmes of 1893, to look on these rather as guides than regulations, leaving each school free to reduce or enlarge them, varying them on the professional side according to the needs of the district, and further giving the director in council with his staff power to draw up the programme and the time table, the whole to be approved by the academy inspector—an excellent piece of decentralisation according to the reporter of the Congress, M. Doliveux; in fact, it is only an illustration of the rule that syllabuses are “good servants but bad masters.” In the case of schools containing an agricultural section, special stress was also laid by the Congress on the need of providing *champs d'expérience* and workshops for learning about agricultural implements, their manufacture, and repair. The second point is the necessity of taking into account class and social distinctions. Even our higher grade schools, while professing to be absolutely and entirely democratic, tend in some places to become class schools, of a class at any rate one degree removed from the lower orders, and in our other schools the class factor is still more pronounced. Into the rightness and wrongness of such ideas this is not the place to enter. But in France, and even in rural France, the same distinctions exist, perhaps in some districts even more than with us. The higher primary schools are entirely gratuitous, and parents who fear the *promiscuité* prefer to send their children to the paying classes of the religious schools. This point was clearly brought home to me by one or two academy inspectors; one at least, who could not be described as anything else than a keen reformer, and was in favour of making the curricula for primary and secondary identical up to eight years of age, recognised the impossibility of a single school for all classes, and told me if fees could only be taken in the higher

primary schools the attendance at them would be half as large again. He was actually engaged in trying to persuade the Ministry to create an extra paying class, and begged them to find some loophole whereby the lower middle class might be able to be educated at the higher primary school. To anyone who looks beyond the letter of the law, it seems difficult to understand why the State, which has both secondary and primary education under its control, should exact payment for one type of education and refuse to take it for another. If paying classes will pay, why should not the State start them? It may be urged that teaching is a State affair, and so the State has no right to show preferential treatment to any class in the same grade of education. But the true point seems to be that the State is bound to afford an adequate minimum of accommodation, but after that may grant additional facilities to those who are willing to pay for them. Otherwise, what right has a State which owns a railway system like the *Chemin de Fer d'État* to take money from first-class passengers for the additional facilities they desire? If parents on the State railway are allowed to pay for superior accommodation, why should not the same privilege be refused them when the State schools are concerned? The idea, too, of a school with free and paying sections is common in France, where it has largely been adopted by the *congréganistes*.

But this innovation, as M. Doliveux points out in an excellent article on the subject in the "*Revue Pédagogique*" of 18th May, 1900, will not always render the higher primary school a success. "La petite bourgeoisie n'est pas ambitieuse, mais elle est très vaniteuse. Elle n'ira jamais à l'école primaire supérieure. Jamais quoi que vous fassiez."* For such people the higher primary school is not good enough. As one inspector said to me, for many a mother, the *casquette* (we should say college-cap) that her son wears possesses an irresistible attraction, as being a kind of outward and visible badge of gentility. The same inspector was not over sanguine of the introduction of an *enseignement spécial moderne* ending at sixteen into the *lycée* of his own town. The peasant is proud, and it would be easy to put it about that the *lycée* was giving an inferior education, though surely this could be met by having a sort of *cours complémentaire*, in which those who wished to stop on could specialise until nineteen. On the other hand, the religious school was willing to fall in with the parents' wishes, even if the pupils only came for six months, and would probably manage to avoid submitting its pupils to the test of a leaving examination for the *enseignement spécial moderne*, on the pretext

Even this insufficient.

* M. Doliveux (*Revue Pédagogique*, May, 1900) deals with the objection, that the educational unity, and above all the moral unity, of the nation, are thereby imperilled in creating schools of different categories. Facts are against the *école unique*, and, after all, the moral unity of the nation depends much less on the oneness of the school than on oneness of doctrine.

that it was only a second class affair. The mere fact of the lower middle class bearing a certain resemblance to the common people only makes them more desirous of emphasizing the distinction. It is obvious, where differences are represented by millimetres, it requires great attention to prevent their obliteration. Differences in metres can take care of themselves. M. Doliveux expresses this distinction under another figure. "It is always on the frontiers that the opposition is most keen."

The future of
the grammar
school.

Still, the remedy for the present decay of the local *collèges* seems to lie, as M. Doliveux points out, not in the excessive multiplication of higher primary schools, to which the small *bourgeoisie* will refuse to go, but in a modification of the too ambitious programme of the local secondary schools, in order to bring them more into keeping with local requirements by the creation of an *enseignement spécial moderne* to finish at sixteen, which has already been started in some *collèges* under the title of *Enseignement moderne B*, to distinguish it from the ordinary *Enseignement moderne* that finishes at nineteen. But will not this *enseignement* tend little by little to become the same thing as the higher primary programme? Already the *lycées* and *collèges* who prepare pupils for the *Arts et métiers* schools are obliged to send in their pupils for the higher primary certificate. "Higher primary education will, in a few years, be given in the *collèges* (and even in certain *lycées*) and in the high primary schools. This *enseignement spécial* will not—cannot be—anything else than higher primary education." Such is M. Doliveux's opinion in his summary of the International Congress in the "*Revue Pédagogique*" for November.* But here, perhaps, two objections might be urged. The leaving age in the higher primary school will probably, to judge by England, be still below that in the *collège*, and secondly, the parents of the boys in the secondary school, being in easier circumstances, will be more inclined to give their sons a rather more liberal education† and slightly less utilitarian preparation than the ordinary higher primary boy would receive. The latter, having no resources of his own, requires to be certain of finding a place in business on the morrow of the day he leaves the school. But, even if the programmes of the two types of school become more or less identical, will there be a cut-throat competition between the two? No, says M. Doliveux, if care is taken not to plant one alongside the other. Their *clientèle*

* This opinion is not shared by MM. Lacabe and Petit, preliminary reporters to the International Congress on Primary Education. They write: "Although presenting certain analogies, these three forms of education—modern, secondary, technical, and higher primary—differ in their means as well as their objects."

† This might be done by adoption of the suggestion of MM. Lacabe and Petit, who suggest that if, in order to live, such and such small grammar school (*collège*) experiences the need to add to these two forms of education (classical and modern) technical courses of study, it would be better then to transform it into a higher primary school, to which one could annex a Latin class.

will never be the same ; one will find its recruits among the small *bourgeoisie*, the other among the smart boys of the lower orders.*

Allusion has been already made to the division into sections of the higher primary schools. These sections, however, seem to be the exception and not the rule. Of 207 boys' higher primary schools in France, only fifty-three contain industrial sections, twenty-five commercial, and only twenty agricultural (M. Doliveux), the Official Report on Primary Education only enumerates fifteen ! M. René Leblanc, in the International Congress on Agriculture, explained the cause of this backwardness. "We are here in a vicious circle ; on the one side the teachers assert there are not enough pupils to form a section, and on the other the agriculturists do not send their children because the section is not organised." As the *enseignement* in the urban higher primary schools becomes more distinctly technical, industrial, or commercial, that in the rural districts should become very clearly agricultural, and M. Leblanc suggested the Congress should propose a resolution to that effect. M. Compayré, the Rector of Lyon, in a speech made a year ago at Belley, spoke of the services the rural higher primary schools with agricultural sections could render. Yet M. Doliveux is not sanguine of their increase. The country is a bad "gathering ground." Distances are great ; there is the question of finding the pupils places when they leave ; and besides, as has been pointed out, the small *bourgeoisie* would rather send their sons to the college. This statement is entirely borne out by a friend of mine, who regretted to me that the wife of one of his tenants had persuaded her husband to send their son to the local college, where he would certainly not receive the education that would best suit him for his after career. Still, the official report urges the creation of an agricultural section in rural higher primary schools, and points out that the agricultural education given in the *école pratique* under the Ministry of Agriculture does not take its place. The small proprietor does not always want anyone to teach his son his work ; he does want him to have a good scientific preparation for it, with a good general education to boot.

There are some eighty higher primary schools for girls, ^{Girls' high primary schools.} but I did not visit any of them, and in fact there were not more than three or four in all the departments under observation. The programme, however, is much the same as it is for boys, with the exception of the theoretical part in agriculture, which has been suppressed, a course that perhaps might be followed in the boys' schools. The chief point which interested me, the *enseignement ménager*, is only represented by a theoretical course of instruction, though in a few schools it also

* Here M. Doliveux is in agreement with MM. Zacabe and Petit. These three forms (see previous note) each "appeal to a distinct following. There where they pose as antagonists, they fail in their mission: one or other gives itself up to encroachments that their clearly defined programmes in nowise sanction."

includes a certain amount of laundry work and cooking. The drawback to any wide extension of this teaching is the cost of proper apparatus. A certain effort is being made to render the teaching of household economics scientific by giving the girls an insight into the component chemical parts of the various simple dishes. The Ministry is also anxious that they should take up gardening, both theoretical and practical.

(4) THE ECOLES NATIONALES PROFESSIONNELLES (HIGHER PRIMARY TECHNICAL).

their nature. The *écoles primaires supérieures* are, as has been seen, partially professional. They never, however, lose their predominant character of giving at the same time a general training. The *écoles nationales professionnelles*, of which there were unfortunately no examples in the Departments I visited, were originally progressive schools of apprenticeship, more or less primary schools with a technical top. A clear idea of their aim is given by the following definition from M. Buisson :—

They are by no means special technical schools, or schools of arts and crafts, more or less complete ; they are school groups comprising the national school, the elementary primary school, and the higher primary school, and embracing at all its degrees the professional education which rises progressively from the first year, in which it is hardly anything, to the last term, in which it is everything.

Difference from higher primary. The best way of distinguishing between the two types, higher primary and professional (technical), is a comparison of the time tables of the two :—

TOTAL NUMBER OF HOURS IN SECOND AND THIRD YEAR COURSES IN

	(1) <i>Ecole Prim. Super.</i>		(2) <i>Ecole prat. d'industrie.</i>	
	General Section.	Industrial.	Second Year.	Third year.
teaching	20	14	12	7½
of theory.	10	14	36	39
practical				
work.	2:1	1:1	1:3	1:5
proportion.				

These professional schools seem to have enjoyed a good deal of prosperity, and the numbers of their pupils have steadily increased. The schooling is free, and pupils enter the higher classes by means of scholarships. The programme is mostly industrial, but at Voiron there is an agricultural pavilion, which contains not only classrooms, but a perfect arsenal of agricultural tools and machinery. There is also attached to this school a large agricultural laboratory and a wheelwright's shop.

their future Up to 1900 the four most important of these schools were under the condominium of the Ministry of Public Instruction and that of Commerce. A vote in the Budget has since transferred them to the Ministry of Commerce. Hitherto they have made a point of insisting on a quantum of general education. Thus the programme of Vierzon states that no specialisation is allowed there except in the workshop, and that only after the first year. The rôle of these schools, says

the Director of Armentières is to develop the general instruction of the pupils. The Director of Vierzon observes: "Our young people are not in general instruction inferior to the higher primary people." It will be interesting to watch whether these schools will still retain this characteristic or become assimilated to the *écoles pratiques d'industrie*, whose object is the *apprentissage immédiat*. The latter schools suffer from a further disadvantage of having interpreted industry in the narrow sense of carpentry and "fitting." They do not give satisfaction "to the sons of bakers, confectioners, jam-makers, bootmakers, tailors, hatters, potters, and so many others, the enumeration of whom would be endless."* In fact the training they give is of little or no use to the rural inhabitants living round a country town. So great has been the over-production of mechanics through this narrow interpretation of technical education, that already the workmen in metallurgy are beginning to suffer from the competition they cause among themselves. Under these circumstances it is not surprising that the International Primary Congress on its own initiative proposed that the condominium should remain for these schools which had not been transferred, not with a view of extending it, for, as M. Doliveux says, "It has not given in general satisfactory results," but in order to prevent the technicalisation of any more higher primary schools through this channel.

It is curious to note that while in England to-day there is a growing tendency to place all forms of education—technical, agricultural, and professional—under the new Board of Education, in France the opposite tendency is at work, not only in technology but agriculture, where the *écoles pratiques d'agriculture*, and, in fact, all the agricultural educational establishments are under the Ministry of Agriculture, and even the teachers of that subject in the *écoles normales* are mainly dependent on it.

There is one very interesting point connected with the transfer of these national professional schools, which was indicated to me by an official. The discipline in the professional schools, under the Ministry of Commerce, has been at times rather difficult. It will be very instructive to see whether the four professional schools which, under the pedagogical influence of the Ministry of Public Instruction, have met with no such difficulties, will find themselves later on exposed to similar experiences. My informant attributed these difficulties to the difference of regime, the discipline in the purely technical schools being rather of a military nature.

(5) AGRICULTURAL SCHOOLS—CONCLUSION OF THE MATTER.

More directly bearing than the preceding category on the education of the country children are the farm schools and practical agricultural schools, which are well described in Mr. Austin Lee's

* Armentières, Vierzon, Voiron, Nantes. For list of the others see official statistics, page xli.

Administrative tendencies.

An interesting point.

The ferme école.

comprehensive little report on Agricultural Education.* Unfortunately they are rather few and far between; in the five departments I visited there was only one—a *ferme école* at Saint Gautier, near Domfront. The farm was founded in 1850. The soil was rather poor, having only recently come under cultivation. It was also let down by the late proprietor. The present director has, however, worked it up again; as much as £80 a year was spent at one time on artificial manure, though the sum is now less. A certain amount of draining has also been carried out, but the high ground requires planting, as it would help to protect the crops. The farm comprises about 321 acres, of which about 74 are arable, 125 pasture, 7-8 garden, 80 wood, 30 common and furze, and 5 are covered with buildings, etc. The rotation of crops observed is: first year, one-third roots, two-thirds buckwheat; second year, four-fifths wheat, one-fifth rye; third year, oats and barley; fourth, clover and temporary grass. The chief danger to the wheat are the drenching showers that sometimes occur. The average yield, $24\frac{1}{2}$ — $25\frac{1}{2}$ bushels per acre. The buckwheat yields 28 to 33 bushels an acre, and the oats about 45 bushels. There are six mares kept, and the colts are sold. The dairy consists of 18 Normandy cows. The styes contain one boar, two sows for breeding, and 5 or 6 pigs, which are kept to fatten. There are 23 pupils, but they are rather young. The average age is only 14 years 10 months. The course is two years in duration. The Government pay the staff, which at Saint Gautier consists of a director, a teacher superintendent, who keeps the books, an overseer of practical work, a gardener, a drainer, a veterinary surgeon, and a drill instructor, and it also contributes 270 francs a year for each pupil. The *ferme école* is generally run by the director at his own risk. The defect of the *ferme école* is, therefore, this, that the director, being obliged, above all things, to make ends meet, is apt to neglect the more moderate pupils, as it pays him best to give the work to the most capable hands he finds among the pupils. Two of my informants who had actually been at such schools described the work as extremely hard. One who went at twenty-one only stayed two years, but the full course for pupils of fourteen to sixteen is three. Another, who to-day is an agricultural professor, spoke in favour of the farm school, though he admitted it was often used as a stepping stone to the higher schools. As he truly said, everything depended on whether the director was good or not. In confirmation of what he said, a peasant proprietor in Sarthe told me how a neighbour of his had been at a farm school, and that he was a farmer *hors ligne*. Though, as Mr. Lee says, the present importance of these schools is comparatively small—they have fallen from seventy-five to fourteen—they still render some service in turning out improved cultivators of the small farmer type.

* Diplomatic and Consular Reports, No. 505, Miscellaneous Series.

The *écoles pratiques d'agriculture* are fully described by Mr. Lee. The only addition I can make to his description is the criticism of several competent persons who asserted that the sons of cultivators for whom these schools were intended do not sufficiently frequent them. Too often the wrong sort go there, attracted by the scholarships, in the hope to get a place somewhere, or to move on to something higher, like Grignon. Hence the education which would benefit a farmer's son is insufficient for these pupils, because they lack the necessary practical grounding.

For a description of the other agricultural establishments of a more advanced type, whether secondary or higher, Mr. Lee's pamphlet will be found useful. One should also add, *honoris causa*, the name of the Christian Brothers' Institute at Beauvais. The horticultural school at Versailles, which is described by Mr. Lee, was visited by my colleague and myself. As an establishment for turning out high-class gardeners who can turn their hand to anything it should be quite unequalled. The garden itself is quite a picture of neatness and productiveness.

Of the agricultural institutions for girls, besides those mentioned by Mr. Austin Lee, there are two dairy schools in Brittany, one at Kerliver and the other at Coëtlogon. The course lasts a year. Girls are received at fourteen. There are scholarships for the necessitous. Mme. Bodin, who read a paper on them at the sixth International Congress on Agriculture, would like to see the course increased to two years, and the multiplication of such schools in suitable rural districts.

Higher Education in Rural France and England.

Summing up briefly one's impressions on what the French have done recently in the way of education above elementary in the country and for the country, it is probable they have accomplished more than we. But our country educational authorities have been greatly hampered by the limited character of their statutory powers. The French have set up in the country districts a certain number of higher primary schools and *cours complémentaires*, with occasionally agricultural sides, as well as founding some forty-one *écoles pratiques d'agriculture*. Yet, as we have already seen, they, too, have to face similar difficulties to our own—the question of distances, of lack of locomotion, and the framing of curricula, and the starting of schools for social classes a little above those whose children frequent the elementary schools. This latter is, perhaps, for us in England the most serious problem. Only in our case it is a somewhat higher class that finds itself left out in the cold. In many parts of England the country shopkeeper, the struggling district doctor, the impoverished parson, and the small-tenant farmer have literally no day school within hail to which they can send their children over and above the elementary school. Nor have we, as in France, a religious party who make it their business

to take an active share in intermediate education in the country, and even reduce the price of board and tuition to something below its prime cost in their efforts to compete with the State schools. We shall probably have to copy the French in creating schools in waste places, which, as they will cater for a still higher class than those who refuse to enter the French higher primary schools, will have, of necessity, to be christened secondary. We must, further, recognise, as they, that country secondary education ends at sixteen or, at the latest, at seventeen, and largely modernise the curricula of most of our country grammar schools, and if we may not subsidise private enterprise, yet at least we might allow, like the French have done, public scholarships to be held at such private schools as fulfil the tests of efficiency in districts where the educational supply is inadequate.*

CHAPTER X.—THE EXTENSION OF THE SCHOOL'S WORK, ŒUVRES COMPLÉMENTAIRES.

(a) INSIDE THE SCHOOL.

The
vis viva of
French
primary
education.

The vigorous life of the French primary schools is indicated by the broad view taken by the teachers of their sphere of action. Under the steady encouragement of an all-seeing, intelligent, and sympathetic Executive, they have been able to utilise their superfluous energies in a regular cycle of good works, in which public bodies and private individuals have alike co-operated.† These might, in a way, be likened to flying buttresses, which go far to shore up and strengthen the already strong position the school has acquired in the country. This work may be roughly divided up into educational effort inside and outside the school. Under the first head may be classed the *caisse des écoles*, the school savings bank, the *mutualité scolaire*, the school libraries, the temperance societies, the associations for the protection of birds, the school shooting clubs, etc. The school libraries, which are in the first category, extend into the second in the cases in which they are open to parents as well as to pupils. Under the second head come the school patronage societies, the associations of former pupils, and last, but not least, the great work of evening teaching and recreative work, consisting of popular readings, lectures, and evening classes for both sexes, leading up to and embracing the new-founded popular universities, which are practically a form of our University Extension movement. In addition, we find in the towns a strong feeling in favour of school colonies, a number of school children being every year planted out during the summer

* See Rapport E. P., p. 370.

† The part of the teachers in these "works of supererogation" is very fairly measured by the proportion of memoirs contributed by them to the International Congress on the subject of evening continuation schools (twenty out of twenty-three).

holidays in the country, not being billeted among the villagers, but quartered in the country boarding schools, which are kindly lent for the purpose. Some, of course, of the above undertakings, are more or less obligatory, but the success which has attended them has in nearly all cases been due to the teachers and inspectors, for the finest scheme in theory will not work without the expenditure of human energy.

The *caisse des écoles* has already been treated of as a means for promoting regularity of attendance by providing the children of the indigent with books and clothes. I did not, however, come across the school restaurant (*cantine scolaire*), which is an established thing in Paris, and provides both gratuitous and paying meals, though I was informed in one or two schools that the children receive bread in winter. Some of the teachers, however, kindly look after the children who come from a distance, and cook and warm their dinners for them. At Coquainvilliers the children who stop during the mid-day interval pay a sou a day for cooking, etc., and the poorer children pay nothing. At the girls' school at OUILLY (Calvados) I saw a table neatly set out with the victuals the children had brought. Each child had its bottle of cider, with meat, or sausages, or eggs. The teacher only charges for the use of the crockery, cooking, etc., 1 franc 50 cents a month. At Neufchâtel, in Sarthe, the children who come from a long way off are allowed to warm their food on the school stove, which smacks strangely of one's schoolboy efforts at the culinary art on the hot-water pipes. A few figures will show the extent of the work of the *caisse des écoles* in the districts I visited. In Calvados, 1897-98, 3,832 children received clothes, 2,613 food, and 12,837 school books. There were 720 schools with *caisses*, and their total budget amounted to 124,607 francs 65 centimes. In Loir-et-Cher in 1898 there were 244 *caisses*, and the communes contributed 70,044 francs. In Sarthe, which is a rich department, a *bureau de bienfaisance* is to be found in nearly every commune. The subsidy of the commune seems to vary; it was 50 francs at Neufchâtel, 15 at St. Paterne, and at Chargé (Indre-et-Loire) it was only 10 francs.

The *caisse d'épargne scolaire* seems to be on the down grade in France. In 1886 there were 23,375 *caisses* for the same number of schools (out of some 100,000), with 484,162 depositors and 12,338,253 francs on deposit; in 1887 there were only 16,878 *caisses*, with 327,999 depositors and 9,880,031 francs as deposits. There are two reasons for the present decline—one the adoption of the *caisse d'épargne postale*, and the other the diversion of the scholars' money to the *mutualité scolaire*. Looking through the statistics of the departments visited, it appears that in Calvados the number of children depositors was 4,266, and the sum amounted to 171,356 francs. The depositors showed an increase of 69 on the preceding year, but the deposits fell 10,076 francs. In Orne in 1898 there were 66 *caisses* working, with 1,204 depositors and 27,346 francs on deposit. The Academy Inspector remarks: "This institution is slowly dis-

The *caisse des écoles*.

The *caisse d'épargne scolaire*.

appearing; it is being replaced by the post office savings bank. In Loir-et-Cher, on the other hand, the *caisse d'épargne* is in the ascendant. In 1894 there were only 142 *caisses*, with 2,646 depositors and 42,351 francs to their credit; whereas in 1897 there were 262 *caisses*, with 5,001 depositors, with 89,414 francs to their names. In this department I came across one or two remarkable cases of saving. At St. Denis-la-Victoire each of the nineteen children had a savings bank book."

A similar system to our device of sticking postage stamps on a sheet was shown me by a teacher at Chauffour. The stamps in this case are those of 5 centimes. When they reach 20 they are accepted by the *caisse*, and credited to the child. At the same school I was told twenty-two out of thirty-one children had opened an account. This seems a high percentage, but Sarthe is one of the most thrifty and saving Departments.

Other methods for encouraging saving are the giving of centimes as good marks to children either for work or attendance, and the presentation of a bank book with a small sum in it in the place of a book at prize-givings. This practice is also common in religious schools. Thus at the boys' school at Alençon the top children receive banking books as rewards. In the various sums given or bequeathed to the primary schools in Loir-et-Cher in 1899 one comes across such entries as—"M. Le Baron Blanquet, un livret de caisse d'épargne de 10 francs pour récompenser l'élève, etc.; M. de Bernard, 50 francs pour livrets de caisse d'épargne, etc.; Mme. Veuve Sudrot, 20 francs pour prix et livrets de caisse d'épargne, etc. Legs Munier, 200 francs répartis en 4 livrets de caisse d'épargne," etc. This method of acknowledging the gifts of private donors in the official report for the year is not without its value *pour encourager les autres*.

*Mutualité
scolaire.*

The *caisse d'épargne scolaire* has been the stepping-stone to the *mutualité scolaire*. This system of mutual insurance was founded by M. J. C. Cavé in the XIX. arrondissement of Paris (la Villette). He was president of the Mutual Aid Society, and was struck by the smallness of the pensions to which an adult could look forward. He therefore bethought him of the child. The system is very simple. The child pays in 10 centimes a week; half of this is put by to provide the child with an old age pension, the other 5 centimes are employed to serve as "sick pay," at the rate of 25 to 50 centimes a day for the family of the contributor. (At Caen the pay is 50 centimes a day for the first month and 25 centimes afterwards.) Thus, as M. Edouard Petit has pointed out, the society is at once a society of thrift and of solidarity. The codary schools are also being interested in it. Already ten *lycées* and *collèges* for girls and fifteen for boys have taken it up. The *lycées* contribute the same as the others, but abandon their rights to sick pay. Funds are also derived from honorary members in Calvados; these pay a minimum of 5 francs. It is calculated that at fifty-five a contributor of a penny a week will be entitled to £10 a year! The movement has had

a great success. In 1895-96 there were seventy societies. To-day there are 871 in full working order and 250 under consideration.* More than 300,000 children are mutualists.

As regards the extra work for the teachers, it is stated that in the six classes of the Ecole Boileau at Paris, which counts over 150 members, each teacher does not spend ten minutes once a week to register the receipts, and the whole business does not involve an hour's work for the head teacher. The particular form that the mutuality takes is varied. Thus, in Calvados it embraces the whole department; in Sarthe it goes by arrondissements (Saint Calais, La Flèche). In other departments it is by cantons, as apparently at Tours. Some persons hold that the department is too big a unit, but, as one inspector said to me, there could not be any great difficulty to split the society up in sections to correspond to the arrondissements. I did not happen upon the system in the course of my rounds through other departments, but M. Petit, primary inspector at Argentan (Orne), told me they were thinking of starting a society there.

In some schools there is a shooting range. I came across *Tir scolaire*, one or two, but they are not very numerous. This year for the *tir scolaire* at Rouen, which was for all the region, only fifteen schools competed. At St. Aubin-sur-Mer I found a "tir." The distance was twelve metres, and the teacher had invented an ingenious system of pulleys for removing or replacing the "cartons" or cardboard discs, which obviated the need of going near the target at all. At Chauffour the teacher told me he allowed the elder pupils to "faire un carton" (fire a set of rounds), once a week, as a sort of reward for good work (an excellent idea!)

Of the various temperance societies which have branches in the schools or among the old boys I did not come across any examples. To judge by their exhibition at the Paris Show, they seem to be becoming increasingly active. It should be noted, however, that they are not teetotal societies, which in such a country as France, where wine and cider are the national beverages, would never gain a foothold. They allow, in fact, of a moderate use of fermented liquors, whether wine, cider, or beer, and merely pledge their adherents against the use of the various distilled liquors, many of them violent poisons, so unfortunately popular in France to-day, owing to the partial failure of the wine crop through the phylloxera.

School libraries were established by the decree of the 1st of June, 1862, in every primary school. Their contents should include (1) the needful books for class use; (2) those books presented by the Ministry to the school; † (3) those given by the prefect, which have been bought with the money voted by the Conseils-généraux; (4) books given by private individuals, including authors, successful or otherwise; and (5) works acquired

* According to the "Petit Parisien" of October 6th, 1900, the number is now 1600.

† In 1899 the Government vote was 93,000 francs of which 10,000 was to be specially spent on agricultural work.

by the library's own funds. A yearly report has to be made each year by every head teacher on his library. The following figures for all France and Algeria give the following figures:—

	1892.	1897.
Number of libraries - - -	39,645	41,498
Number of volumes - - -	4,858,120	6,190,973
Number of "issues" - - -	6,862,350	7,219,438

It must be remembered that in some cases these books are taken out by adults.

In the department under observation I came across the following figures for Calvados (1897). Number of libraries, 686; volumes, 64,595; readers, 15,804; books taken out, 35,143, which showed an increase of six libraries on the year and 304 volumes. The number of readers was 1,139 less, the number of books taken out 650 more. The reason of this decrease is clearly indicated by the academy inspector. Many of the libraries consist of old-fashioned books, and the presentations made by the State and the town and parish councils are quite insufficient to restock them. In Indre-et-Loire (1897-98) there were 387 libraries, 54,560 volumes, and 66,997 borrowers. The academy inspector in his report speaks of the happy idea of certain teachers to open subscriptions for their libraries. In Orne, in 1898, there were 475 libraries, or two more than the preceding year. The volumes amounted to 49,996, and the books issued to 27,931, against 26,532 the year before. This increase is put down by the academy inspector to the expenditure on new books, of money voted by the department and communes, or subscribed by private individuals. The need of interesting books, of which he complains, is easily seen from a comparison between the books and the volumes issued, which amount to little more than half. In Loir-et-Cher the figures were rather better. There were two libraries more in 1899 than in 1898; the number of books and readers showed an increase of 198, and 443; and, what is more important, there were 46,319 books taken out against 41,912 volumes. In Loir-et-Cher 4,884 francs were spent on the libraries, and nearly as much was contributed in Sarthe by the joint efforts of the department and the communes, who voted 2,000 and 2,552 francs respectively.

The criticisms of the academy inspectors confirm my own experiences. Where the books were either too few or too old-fashioned the library was but little used. At Neufchâtel the school library contained such unsuitable books as "Boileau" and "La Vie de Jésus Christ et son nouveau traducteur," a work of deep erudition, by a member of the Institute. Happily, however, the teacher has started a "popular" library, open to parents and scholars alike. Although the authorities were not at first very favourable, the library has turned out to be a most precious link between the parents and the school. The commune gave a nest-egg of 50 francs, and last year alone fifty borrowers contributed no less than 30 francs by taking out 300 volumes, for which they paid 1d. a time. The money thus earned will be spent in new purchases. It is interesting to note that the most popular books

are "Monte Cristo," "The Last of the Mohicans," "The Three Musketeers," and "Jane Eyre"; the last is *beaucoup lu*. At Beaumont, in Sarthe, I was told there was a *bibliothèque populaire*, much patronised by everyone and largely supported by the munificence of the *délégué cantonal*, who was a good friend to the school in general. I forgot to ask whether there was a regular children's section, such has been created in some of our large free libraries. At Montlivaut there is a library of the Société Républicaine, part of which is reserved to members and the other part open to the commune and the school. In fact the libraries seem to be generally well patronised wherever they contain suitable books.* At Chauffour (Sarthe) the teachers obtained leave to purge the library of reactionary books and add others. The volumes issued, which amounted to sixty-two and sixty-seven for the preceding years, at once mounted in half a year to over 100 for thirty-five children. Some of the books were given by the department. The commune contributed 15 francs, and there was a surplus of 30 francs over and above from the *tombola*, which had been raised to buy a magic lantern, which itself had cost 70 francs.† The teacher informed me the children frequently came and told him they had not brought back the book, as their mother had kept it to read. Other children often read aloud to their parents in winter, especially if the latter are illiterate. This was also the case at Chaumont (Loir-et-Cher), where no less than 360 books were taken out by sixty-eight children (an average of practically six per head against a little over one for all France). Another good figure I copied down was at Lonray (Orne), where twelve children took out sixty books.

(b) OUTSIDE THE SCHOOL.

(i.) School Patronage and Former Pupils' Societies.

The school patronage societies, which are more numerous in the towns than in the country, are really a corporation of friends of the school, who help to provide the school with evening entertainments and assist in placing the pupils when they leave. I came

School
patronage
societies.

*This opinion on the need of suitable books was the subject of a remarkable conference by M. Périé, the present academy inspector of Loir-et-Cher, when academy inspector in Savoie in 1888, in which he gives some interesting figures on the number of readers in a single circonscription. Out of 76,444, 30,000 could read, 6,000 were occasional readers, and 500 habitual readers. Starting from these figures, which show that the appetite of most of those who read is very slight, he insists, in order that it may grow with eating, on the supreme necessity of readable books. We often blame our public libraries in England for not creating a demand for more serious literature. We, too, forget that the majority of readers have not yet cut their milk teeth, and we expect them, all the same, to masticate the toughest of standard authors.

† One of the most original methods of procuring the funds for a library is that invented by a Society called "Les Amis des Livres" in Jura. They hired a field of about an acre, and the seed potatoes were furnished by the members, who also gave their labour for nothing. It is reckoned that the able-bodied members, who numbered 33, would not have to devote more than seven hours apiece during the year to the work. The proceeds of the crop went to augment the funds of the library.

Association
of former
pupils.

across one of these societies at Ecommoy, in Sarthe. It seemed to be in a very flourishing state, possessing 115 associates, and having already disbursed some £80 in prizes. According to M. Edouard Petit, these societies are tending to become assimilated to those of associations of former pupils, in which the outside element figure on the list of adherents as honorary members. The latter, which are often called *les petites A*, are extremely numerous in some departments. Thus in the *Côte d'Or* there are 293 rural *amitiés*, which specially occupy themselves with questions of agriculture and viticulture. The total for all France in 1898-9 was 3,761 associations for boys and 1,500 for girls, the patronage societies being 986. These *petites A* seem to be less common in the districts under observation, though I came across several instances. In Sarthe they amount to twenty-eight. The reasons of this backwardness are naturally manifold. But in two schools, at least, it was not due to a want of energy on the part of the teachers. At Vimoutiers the director of the school told me he had tried to hunt up the old boys, and could not find more than twenty, and those were too poor to form an association. In another school the teacher had made a similar investigation, but discovered there were not enough in his village to form a nucleus. In many villages the young men who were at the school have left, and only the old folks and children remain.

A specimen
society.

One of the most complete societies I came across was that of the Société Amicale des Elèves et anciens Elèves de l'Ecole des Garçons at Saint Aubin-sur-Mer (Calvados), which numbers 175 members (of whom fifty are old boys), out of a total population of only 700. According to the statutes the triple object of the school is to keep up school acquaintances, encourage the sentiment of solidarity, and react against the cabaret by the substitution of harmless and patriotic recreation. The annual subscription is 1 franc; honorary members pay 2, and life governors 20 francs. Religious and political discussions are forbidden. The society has already given several musical and theatrical evenings. The teacher and his class have constructed a temporary stage, and even painted some scenery. The fêtes and soirées are very popular. They have attracted audiences of over 500 people, and have even given rise to the production of a local comedy:—

LE VOYAGE A SAINT-AUBIN-SUR-MER.

Comédie en 2 actes.

DISTRIBUTION DES ROLES.

Lancelot, commerçant retiré	MM. A. DELAUNAY
Maxime, étudiant aux beaux-arts, neveu de Lancelot	G. LACROIX
Alfred, lieutenant de vaisseau, neveu de Lancelot	A. SEVESTRE
Laurent, étudiant en médecine, ami de Maxime	L. MERIEL
Saladin, domestique de Maxime	P. FLAMBARD
Alcibiade, concierge puis marin	CH. CAILLOT
Cérusard, marchand de couleurs	P. AMBROISE
Marins, Huissiers.	

The finances, too, are in a very satisfactory state, the receipts being 201 francs and the expenses 146 francs. As a specimen of how to render village life more attractive in a cheap and satisfactory fashion the above seems an excellent object lesson; the outlay of 10d. a year ought not to be beyond the means of the humblest subscriber. The inspector, M. Trabuc, was loud in his praises of such institutions. They make for local homogeneity, inculcate co-operation, and counteract alcoholism. The young folks at the most critical age come to the school, which is turned into a club room on Sunday, instead of going to the cabaret. In fine weather they play tennis and *le chapeau* on the beach. One Sunday, the teacher told me, there were no games; the result was he met two of his old pupils tipsy. The association take in four newspapers, and lately out of their superfluous funds have bought a phonograph. They were also thinking at the time of my visit of getting up a *tombola* for taking the school to the exhibition.

(ii.) *Evening Continuation Classes.*

The evening continuation classes have had a rather chequered existence. In 1867, under Victor Duruy, the number of classes amounted to 28,586; in 1889 it had fallen to 7,322. The idea had got abroad that the laicisation of the schools, compulsory attendance and the abolition of fees would render the evening school superfluous. The State subscription, which had been as high as 1,300,000 francs, sank to a meagre 20,000 francs. But it was soon remarked that the reforms of Jules Ferry, despite their thoroughness and comprehensiveness, were not a universal panacea. The school attendance was not altogether satisfactory, and, further, it was seen that the most fruitful years of the pupil's life for the acquisition of knowledge and the formation of character are passed outside the school itself. About 1894 a new movement in favour of evening classes declared itself. The numerous societies* for improving popular education, of which the "Ligue Française de l'Enseignement" is perhaps the most important, took up the new crusade in favour of evening schools, which in the big towns was already being carried on by such societies as the Polytechnic and Philotechnic Associations. Among their most ardent backers were M. Léon Bourgeois and M. Ferdinand Buisson. In 1895, M. Poincaré, then Minister of Public Instruction, issued a circular on the subject, which has been described as the charter of popular education.

The line taken by M. Poincaré has been followed by M. Rambaud, his successor, and M. Leygues, the present minister, who has found a worthy second in the present head of Primary Instruction, M. Bayet. But the life and soul of the present renaissance in evening schools has been M. Edouard Petit, who has gone through the length and breadth of the country in order to start new centres

*M. Edouard Petit puts these at 1,200.

Teachers. or revive old ones. Still, the movement could not have been so widespread if it had not fallen on good ground, in the shape of the primary teachers, who have nobly risen to the occasion. It was in reference to this work that a teacher of Clermont Ferrand proudly wrote:—"One can count on the absolute devotion of the teachers whenever it is a matter of working for social regeneration and strengthening the Republic." A few eloquent figures on the progress of the work will show that these are no idle words. In 1894-6 there were 7,322 *cours* for men, in 1899 there were 26,881; nor are the girls neglected. These classes, which are generally taken on Sundays, owing to the objection to their being held at night, have felt the influence of this vigorous movement in favour of adding a "morrow to the school life." In 1894-95 there were 966. In 1899-1900 they had risen to 16,610.

Finance. The increasing interest of the State is best shown by the following figures. In 1894-95, its contribution was only £800. In 1896-97, it was over £5,000. To-day it stands at £8,000. This sum is split up into small subsidies, that vary according to the departments. In 1898, 650 francs, or £26, of this money went into the pockets of the teachers of Loir-et-Cher, and a similar sum was distributed among the teachers of Sarthe.

The bulk of the money is found by the local authorities, who have raised their grants in aid from £46,000 in 1895-96 to £64,000. This is doled out in sums of 150 francs on rare occasions, more often of 100 and even 50 francs; sometimes it is only 25 francs, and in not a few cases the teachers get nothing. The rest of the contributions come from private sources, which in 1895-96 were responsible for £1,800, and last year for £10,000. The movement is further encouraged by a distribution of decorations, medals, diplomas, books, and letters of congratulation to the teachers.

The five rural departments under observation, though far from the "madding" crowd of Paris, have not remained unaffected by the movement. In Calvados, in 1897-98, the statistics were as follows:—Evening schools under male teachers, 131; under female teachers, 23: total, 154. Number of enrolments: men, 2,152; women, 245: total, 2,397, or an increase of 61 in the classes and of 980 in the enrolments. The number of State teachers in the department is 1,228. Orne did still better in 1888-89. With 1,014 State teachers, the number of *cours* rose from 137 to 167, and the hearers from 4,968 to 5,903. Sarthe, with 999 teachers, had 214 men's classes and 97 female, or a total of 311 classes. The enrolments amounted to 5,248, or a little inferior to Orne, but the increase on the year was 623. In 1897-98, Indre-et-Loire, with 820 teachers, had only 131 *cours* instead of 139 the year before. The number of pupils, however, shows a small increase—2,995 instead of 2,947. A very satisfactory item was the regular attendance, which stood at the exceedingly high figure of 2,445 against 2,379 of the year before; or something like 84 per cent. (against about 57 per cent. for all France). In Loir-et-Cher, with

769 teachers, the *cours* show in 1888-89 a rise from 311 to 328. The attendance also worked out from 5,182 to 5,308.

Of course the number of teachers is not altogether a correct guide to the number of *cours*. In Indre-et-Loire, 143 teachers participated in 131 *cours*, and at Mayet I was told the *cours d'adultes* was shared by the director and his three subordinates. At another school the teacher's wife told me that owing to the illness of her husband she took the major part of the work, for which her husband received later on an official reward. Deductions should also be made for those teaching in the maternal schools. But as a rough and ready approximation of the activity of the various departments it is highly interesting. Thus in 1897-98, in Calvados, at least one teacher in eight was interested in the work; in 1899, in Orne, one in six; in 1899, in Sarthe, nearly one in three; in Indre-et-Loire, 1897-98, less than one in six, and in Loir-et-Cher, nearly one in two. A comparison with some of our English counties would be interesting. According to the official statistics for 1897-98, Calvados, Orne, and Indre-et-Loire were among the most backward departments, Orne being last but two in the number of *cours*, and Calvados, again being among the last ten for fewness of students.

The sizes of classes were in Calvados (1898) about 15; in Orne Size of class. (1899) over 35; in Sarthe (1899) nearly 17; in Indre-et-Loire (1898) over 22; in Loir-et-Cher (1899) about 16. The average for all France in 1897-98 was about 28.

I was anxious to find out if these numbers were mainly swollen by the town classes, and the country schools contributed mainly "skeleton" departments. In one or two instances I certainly found very small numbers. In one place there were three, in another four pupils, in another eight, and in a fourth ten, but then there were only twenty-one children in the whole school. Against this I must set such numbers as 23 at Chauffour (school population 35); 29 at Trun (school population 115); 20 at Loué; 22 at St. Avenin, with an average attendance of 20; Mayet, 26 (school population 178). The same teacher in another village of 579 inhabitants collected all the conscripts. Neufchâtel, 25 to 30 (school population 70); Montlivaut, 21 (school population 21); La Chaussée Saint Victor 18 (school population 37), once as many as 40, but numbers cut into by the establishment of a musical society; Chaumont, 31 (school population 68); Mosnes, 40 (school population 58); Ecommoy, 50 (school population 184).

The duration of the session, length of lessons, and number per Duration of week vary. Being essentially a winter school, its extreme limits studies. are October and April. In Indre-et-Loire the lessons averaged five and a half hours a week and lasted $3\frac{1}{4}$ months. In Loir-et-Cher the average duration was three months. In several schools the number of hours was three and a half a week. In Calvados, according to M. Vieillot, the secretary to the academy inspector, the classes are held two or three or four times a week. In fact

every teacher is more or less a law unto himself, as there is no evening schools code.

Variety of
the work.

For the same reason, the choice and variety of subjects taught are very great. Some, as M. Edouard Petit says, hold classes to help the backward to make up leeway, others prefer continuation classes, while others indulge in teaching which is rather technical. Most of the instruction in the rural districts falls under the first two heads. At Vimoutiers the class composed of workmen is taken in arithmetic and composition. At Ecommoy the subjects are the ordinary ones, interspersed with readings by the teachers, a system that M. Edouard Petit says is very popular and gives good results. The teacher at Mayet told me he did a little of everything, and attempted to make the teaching, above all, interesting and practical. He especially eschewed dictations. At St. Avenin the teacher tries to make his class a continuation of the day school, with applications to industry, agriculture, and practical drawing, drainage, and some simple notions of the law of ownership, such as the laws about mortgages, fences, servitudes, maintenance of roads, and other practical matters. At Chaumont the evening school is more or less a continuation of the school studies. At Lonray, the mistress gives Sunday lessons to the girls in household matters. Such agricultural education as is given in the evening schools seems rather to be given in the form of conferences.

its moral
side.

Nor is the moral side of education neglected. The social *milieu* and atmosphere of the primary schools are continued in the classes for adults. This is especially true of the crusade against alcoholism. On this point the Academy Inspector for Orne writes:—

In the majority of the adult classes the lessons, work, and passages for reading have likewise frequently borne on alcoholism, and have had for objective the treatment of the question from the double point of view of morality and the physiological consequences on the individual and the race, and it must be admitted this last point makes more impression than the first. When the teachers make known the ravages of alcohol on the different organs of the body, relate precise facts verified by the doctors, show and hand round pictures relating to their subjects, adults and children are obliged to reflect. There is ground for believing that these reflections will bring about good resolutions, that efforts will be made, and that the scourge of alcoholism will gradually disappear.

Some of us may, from a different conception of human nature, consider the academy inspector unduly sanguine. More than one teacher admitted to me that they thought there was little to be done with the older people, and that is, it is to be feared, much the same case all the world over. We all know Harvey's remark as to the impossibility of finding any doctor over forty who believed in his discovery of the circulation of the blood. But there is one bright spot. In many places the teachers have got hold of the children, and, as an English bishop is reported to have said, when speaking of East London the other day, those who have got the children have got the future.

I spoke to a good many people about these classes. One inspector told me he did not look on them as serious, and another said there were too many playing at "make-belief" among the teachers (*farceurs*). Two teachers told me they had given up their classes, and one said in excuse he had too much to do. It was the only case I came across of a teacher who kicked at these extraneous tasks. Several were rather lukewarm. It is evident that local difficulties and habits must be considered. A teacher who had only a small class told me he found the young men preferred to *courir la rue*. At Carpiquet the teacher, who certainly cannot be accused of want of energy, informed me he could only get together twelve pupils (school population, thirty), as the bulk of the population are masons who work in Caen, about four or five kilometres away, and were, therefore, too tired to come in the evening. Distance, again, is another obstacle; people cannot be expected to turn out for a three kilometres' trudge to the school on a dark winter's night. At St. Paterne the teacher could not hold Sunday classes for girls, and the reason seemed an adequate one. The inhabitants of the village start work in Alençon, about two kilometres off, at 5.30, even in the winter, which means rising at 4.30, and only get home at seven. Sunday is therefore the only free day for them and their children to be together. These various difficulties are frankly recognised by the academy inspector of Orne, who sums up very well the different obstacles. "Unhappily it is not possible to open adult classes everywhere. The causes are the sparseness of the population, fatigue, emigration of the young to the towns, the insufficiency of the resources of the communes to assure what is certainly a minimum, the heating and lighting of the schoolroom."

Seriousness
of the work.

But the greater number of those with whom I conversed were favourable, and, in some cases, even enthusiastic, about the evening schools. These sentiments have even gained the villagers in some instances. One teacher in Indre-et-Loire assured me that if he did not give evening classes the commune would agitate for his removal, and that many communes in the neighbourhood held similar views. There seems little doubt that in numerous districts the French teachers have thrown themselves with great heartiness into the fray. Allusion has already been made to the teachers in Seine Inférieure, whose ardour the authorities have had to curb by reminding them that, after all, the first of their duties is towards the day school.

But if this fine and far-reaching movement is to take deep and abiding root, it is obvious it must be rendered economically sound. The subsidy of the State, excellent as it is as a sign of encouragement, is only a fleabite in the matter. The 650 francs for Loir-et-Cher work out at under two francs per teacher engaged, and that for Sarthe at about the same figure. The system of diplomas and rewards is also useful, but this again can only be an accessory. One teacher seemed to me to put the matter very plainly when he stated he had received more complimentary letters than he knew what to do with.

Need of
putting the
whole on an
economical
basis.

Private initiative, too, though helpful, is insufficient. The best system seems to be that of persuading the *municipalités* to assist the work by giving small grants, which will at least cover the out-of-pocket expenses of the teachers, who often spend some twenty-five to thirty francs out of their slender stipends. This, as has already been alluded to, has been largely done in Sarthe, where one inspector alone has managed to secure 6,000 francs from the various communes in the district, and, in fact, yearly grants for no less than 12,706 francs have been obtained in the whole department. Loir-et-Cher did even better, obtaining 23,207 in 1899 from the communes. This view is also shared by the academy inspector of Indre-et-Loire, who strongly insists on the need of proper and regular subsidies from the town and parish councils. It is also supported by the paper of a teacher on the reorganisation of the *cours d'adultes* at Clermont Ferrand, who says:—"One will not found a durable work if the zeal of the masters is not sustained by a reasonable remuneration." A possible alternative is, of course, paying classes. In Sarthe in 1898-99 no less than 2,630 francs was contributed by the pupils to the evening schools. A teacher who had adopted the system in his previous school told me it answered well, and those who paid always turned up punctually. Still, in most neighbourhoods the classes have been "free gratis and for nothing," so that a complete return to a fee system would be well-nigh impossible. Under such circumstances the best course to follow seems to be the adoption of the proposal of the International Congress, to make the *indemnité*, hitherto facultative, obligatory for the departments or the communes, failing the State.*

The possibility of compulsory attendance.

Such a proposition, if adopted, would probably do more than render the *cours* more efficient and more widespread. It would also bring the question of obligatory attendance at the evening school within sight. One or two teachers I met, notably the teacher at Montlivaut, broached the subject. And the point was also raised in several papers contributed to the section on the *œuvres post-scolaires* at the International Congress on Primary Education. The advocates of such a reform made a good point by drawing attention to the compulsory attendance which already exists in Switzerland, Hungary, and Germany.

Certificate.

Another point raised at the same congress was the establishment of certificates for evening classes stating that the pupils had regularly followed such and such classes. Their utility to employers of labour, or to the heads of Government or municipal authorities, was asserted by the Congress. The establishment of such certificates would probably lead to the establishment of some sort of examination, for it would doubtless be argued that a simple "testamur" of school attendance was not so valuable and precise as the officially recorded result of a regular examination. The ultimate effect would be the production of a code for evening schools with many alternative syllabuses, but some fear a stereotyped code.

* This view has the sympathies of the administration.

(iii.) Lectures: Recreative or Educational.

Lectures.—The recreative side is by no means neglected in the extension of the school work. The instance has been cited of the practice of some teachers to give readings in class, which, apart from interest to the pupils, often makes them desirous of finishing the book for themselves. From this reading aloud in class to the public conference is but a step, and from thence it is likewise an easy transition to the regular lecture with magic lantern slides. Here again a careful choice of subject is requisite. Just as with the library for scholars and adults it is necessary to select books that are really within the intelligence of the school *clientèle*, so in the country it is advisable to consult country tastes and ideas. A literary causerie, a discourse on *la morale*, a lecture on political economy, are condemned in advance. These are more suitable for the more serious class work of the school. But a lecture on agriculture, or grafting, or manures, or vine culture, if practical, is sure of success. The same is true of any conference on one of the subjects of the day, China or the Transvaal, or some social subject, such as alcoholism.

Mention has already been made of the facilities for obtaining slides from the *Musée Pédagogique*. In 1896-97 the Musée loaned out 8,363 collections; in 1899-1900 the total rose to 26,963. The conferences have increased with the same rapidity. In 1894-95 there were 10,379; in 1895-96, 61,476, of which about 47,000 were without lantern slides; in 1899-1900 the total came to 123,911, of which some 58,000 were with views. The attendance has risen from one thousand to three millions and a half.

The North-Western departments could not fail to be influenced by this prodigious outburst of energy. Even in Calvados in 1897-98 the number of *cours* rose nearly a quarter—from 674 to 850. Of Orne I could gather no statistics, but the academy inspector in his report gave an admirable exposé of the scope and value of these lectures, which will be quoted further on. In Sarthe (1899) there were no less than 1,643 conferences, and the average attendance was over one hundred for each; the year before they only totalled 947. In Indre-et-Loire (1897-99) the conferences rose from 640 to 688, but there was a decrease in the average attendance, from eighty-one to sixty-two. In Loir-et-Cher (1899) a much higher level was reached. There were altogether 1,281 conferences, followed by 17,371 persons.

A few of these lectures have been given by persons unconnected with the school—the local doctor, or a farmer, or a retired military man. But these “extra specials” have been comparatively rare. It is the teachers, and the teachers only, who have borne the brunt of it. *Ce sont toujours les mêmes qui se font tuer*. This matter of getting outside help is not so easy as it looks, and some ill-disposed persons are quite capable, as an academy inspector told me, of utilising the opportunity of giving a lecture on some apparently innocent subject to turn their discourse more or less covertly to political account.

Magic
Lanterns.

In many cases the teachers have raised money for magic lanterns by means of small lotteries in the village itself, as at Chauffour. In other cases, as at Loué, a *tombola* was started in the district round to buy a lantern. The success of lectures in this region is very great. The teachers have bumper audiences, amounting at times to 250 people. In Indre-et-Loire there is a departmental lantern, which the administration place at the teachers' disposal.

Slides.

In addition to the views lent by the *Musée Pédagogique*, slides may be borrowed off the numerous societies for encouraging popular education, such as the National Society for popular lectures, the Havre Society for Education by Illustration, and the French Education League. A very effective method of supplying cheap views is followed by one of the numerous pedagogic journals, "*Après l'Ecole*," which distributes with every one of its issues transparent views, which only require to be cut out and mounted to serve as slides.

Scope and
value of
these
lectures.

The scope and value of these illustrated lectures are well described by the academy inspector of Orne:—

A pretty large number of teachers have given lectures, most of which were accompanied with lantern slides. As was the case last year, these lectures have been very well attended. They render a very real service. The agricultural lectures in particular are always highly appreciated. The teachers who are in charge of them show the greatest pains in the accomplishment of their task. The end we propose is to enlighten the facts of daily life with elementary scientific notions, to destroy certain prejudices, to make known new methods of cultivation and their relation to old ones, to show the utility of association. In a word, to seek to improve the lot of the agriculturist. The results obtained are already appreciable.

A proposed
improvement.

There is, however, room for improvement in these lectures. At present the subjects chosen have often little or no connection. The lecturer passes from "China" to "Peru," or after a lecture on literature he takes up such a subject as foot-and-mouth disease. As M. Doliveux says, the result on his listeners is rather to make them regard these lectures as a source of distraction than of instruction. A methodic programme is wanted, in which several teachers might co-operate, each taking a part and lecturing in turn in each other's villages.

Summary.
Educational
value.

This recreative work, so cheap and so attractive, is even in its present unorganised state a valuable educational agency. By his mere choice of subject, by his manner and style of putting his lecture, the teacher finds himself occupying a sort of lay pulpit, from which he can give expression and currency to those ideas he thinks most worthy of circulation. Yet while there is a place, and a large place, for methodic courses of lectures, it would not probably be wise to abandon entirely the isolated recreative lecture. To the educationist it should represent a valuable means for attracting to the school itself those for whom at the outset the more serious evening classes do not offer of themselves sufficient inducements. These "lay sermons" stand for the exoteric teaching of the school, and one of their most precious sides is, in a pedagogical sense, the number of converts they may draw, through being given in open meetings, to the educational fold.

Their direct recreative value is still more patent. Every village cannot realise Lord Salisbury's impossible wish of possessing a circus, but it can at least have a magic lantern, and with a teacher who understands his audience the list of interesting and topical subjects is practically inexhaustible. These weekly or fortnightly lectures on winter nights must go far to redeem the dull monotony of the country in winter. They cannot fail to draw the villagers more together. Local patriotism is never wanting in the French village, but there is still a certain amount of *méfiance* among the ordinary peasants which such reunions would help to disperse. Again, there is the counter action of these lectures on the good name and influence of the school in making it popular with and respected by the parents in permitting them to become better acquainted with the teacher, and come, to a certain extent, under his influence. Among the three and a half millions odd who, through these lectures, have learnt to know the teacher better, there must be many thousands who have also learnt to rate him higher, not only as a teacher but a citizen. And so in some cases the village schoolmaster bids fair to become the "lay rector" of the parish.

Recreative value.

Social value

CHAPTER XI.—THE RURAL PROBLEM.

(1) IS THE SCHOOL TO BLAME?

The French rural problem is no easy one, but, as far as my experience goes, and I talked to some 140 persons, many of them unconnected with the school, there seemed to be no general tendency to impute to primary education the ills the countryside is heir to. I was particularly anxious to find out if the teaching was considered too literary. Undoubtedly the old programmes were exposed to this criticism, but most persons seemed to think that if the promise of the new agricultural syllabuses were fulfilled, there would be little cause for complaint. In fact, the only criticism I heard under this heading was at the two agricultural congresses I attended later on at Paris. One or two speakers at these criticised the work and teaching of the rural school, but most of their objections seemed rather to refer to the rural school as it was ten years ago, and where their demands on the school and what it should do were not exaggerated, they were met, as M. René Leblanc pointed out, by the new regulations for agricultural teaching. Nor did I hear the school accused of being the cause of the rural exodus in the shape of making the children discontented with their lot, or of stuffing their heads with a deal of rubbish they would do better without. Some teachers, no doubt, are apt to magnify the importance of the *certificat* and *brevet*. On the other hand, I came across a remarkable passage in an address by M. Deries, the Academy Inspector of Manche, in which he lays to the credit of certain

Is the school an adverse factor?

Programme too literary?

Discontents the pupils?

Subversive
tendencies?

teachers their efforts to retain in the country those children whose parents advise and almost command them to go out into the world and seek their fortune. The inspector goes on to state that intelligence is just as badly wanted in the country as elsewhere, and teachers should strictly avoid making themselves accomplices of the parents' often foolish vanity to see their children enter the already overcrowded liberal professions.* I did, however, encounter several persons who fell foul of the teaching and tone of the school. Most of these, it must be confessed, showed their bias by describing it as the *école sans Dieu*.† To such persons the State school represents one of the principal engines for undermining the respect for authority. But this phenomenon is not confined to any one country, it is universal, and is sometimes at bottom only a symptom that the "old order changeth." As M. Gréard has said, "L'autorité n'est plus le principe souverain qui règle aujourd'hui les rapports sociaux." Often the cause is directly traceable to the sad decrease in parental authority, of which M. Martin, Academy Inspector of the Ardennes, complains. But social and home influences were alike ignored by these adversaries of the *école laïque*. Judicious cross-examination only made them, like Molière's Marquis in the *Revue de l'Ecole des Femmes*, reiterate the charge. The school was detestable because it was detestable, and that was the long and short of the matter. Yet they might have bettered their case by pointing to sundry "false notions of liberty and equality" which exist to a certain extent in the country, and against which "it is the duty of the school to warn" its pupils, according to the inspector of Béthune, 1895. But even then to saddle the teachers with the direct propagation of these doctrines of anarchical freedom and dead level equality would be quite a different matter.

A favourable
verdict.

So much for the adverse evidence I collected, and now for the other side of the shield. Of course, in places where *laïcisation* has recently taken place, the school may not be very popular. But as has already been pointed out, the religious difficulty is on the decline, and even in the more catholic districts an attack on the *école laïque* would be generally *mal vu*. In fact, to use a phrase of one of the primary inspectors I met, the school to-day is well acclimatised. This applies equally to the teachers who represent

*This is not a cheap matter. M. P. Déghilage, in his book on the depopulation of country districts, puts the following speech to a parent into the mouth of a teacher:—"It is two thousand pounds you must spend, if your jackanapes is twelve years old, should you wish to make a doctor or a lawyer of him."

†This charge has already been discussed. A quotation from M. Payot, Academy Inspector of Ardèche (1896), is also to the point:—"Tous les reproches que l'on adresse à nos écoles au point de vue de l'enseignement moral ne s'adressent en réalité qu'au caractère laïque de nos écoles. On essaie de faire croire que laïciser c'est 'déchristianiser.' C'est une erreur absolue. Il y a mille ans que la France se sécularise. Saint Louis, comme on l'a fait remarquer, en laïcisant la justice jusqu'alors confiée à l'église fut le premier des laïciseurs."

the school in France more fully than their English colleagues, who are too often regarded as the hired* servants of the Board or the school managers. Of course there are cases in which the teacher has become involved with the villagers in personal and political differences, of which the latter are generally a cloak for the former. But the few teachers I came across who had been in this predicament did not seem to have imperilled their position or that of the school, while the great majority have certainly done much to make themselves and the school looked on as part and parcel of the village life. The general evidence in favour of the school was so overwhelming I very often did not make a special note of it, but the following are some of my impressions (verbatim or shortened). "Peasants not against the programme" (inspector). "School as a rule popular with the peasants" (secretary to Academy inspector). "School well regarded by the peasants" (normal school director). "Rural schools in sympathy with the district, and teachers respected" (head of cheese factory). "Parents who have been at the school send their children more regularly than the illiterate" (teacher at Carpiquet). "The peasants, and above all the small farmers, approve of the teaching; industrial population, less so" (teacher Saint-Martin-de-la-Lieue). "There are many good teachers, but there are some who only teach a few of the children" (peasant farmer). "Teacher says he is on good terms with the peasants" (C.). I travelled with an inspector and noted he was on excellent terms with the numerous peasants we met; the conversation was almost exclusively agricultural. A peasant farmer, a peasant proprietor and a corn merchant spoke equally well of the schools. I had also an interesting conversation at Montlivaut with a peasant, who seems thoroughly satisfied with the schools. To these instances may be added the several occasions on which I visited the *champs d'expérience* with the teacher, and talked with the peasants we met. The good feeling that exists between school and commune is further exemplified by the ready way in which the latter have, when properly approached, come forward to subsidise the evening classes. These, again, should prove a most valuable agent in consolidating the already well-established relations between the school and the villagers.

It seems therefore that one may very fairly put the school on one side in any examination into the harmful factors in the economy of rural France. Whether it has any appreciable effect as an influence for good may best be considered after the problem itself has been diagnosed.

(ii.) STATEMENT OF THE PROBLEM.

The five departments which fell to my lot to visit would be looked on as distinctly rural if they were in England. Each contains ^{The problem stated.}

* Of course, their status is happily much improved since the days when Matthew Arnold likened their relationship to the rector as equivalent to that of the latter's gardener. But for the petty tyranny that sometimes goes on under small boards and voluntary managers, see Report M. G.

at most a single town that can be regarded as anything above that of a market town of fair dimensions, although scattered up and down several of these departments, especially along some of the valleys, are a certain number of small factories, which are not, however, sufficiently numerous to give the country an industrial aspect. The main industry of all these departments is agriculture, whether it be butter or cheese making, corn raising, grazing cattle rearing, horse breeding, cider making, or vine culture. On the line of hills that form the watershed between the affluents of the Seine, or the Seine estuary, and the Loire, lie large patches of forests, in which the inhabitants are often engaged in clog making. Agriculture being therefore the chief occupation of by far the larger number of inhabitants, it is clear that any inquiry into the present state of the population would take the form of questions as to the general condition of agriculture, as affected by land tenure, taxation, wages, existing modes of cultivation, and the supply of labour, with a few stray investigations of the actual condition of industrial work and workers wherever they were encountered. These questions would naturally involve further ones, *e.g.*, whether there is a rural exodus, and, if so, to what extent? Are Paris and the apparently higher wages of Paris the reasons for this? Or is the present unrest in part due to conscription? Does this rural exodus produce a diminution in population? And if the diminution exists, is it accelerated by other factors, such as a decrease in the birth rate? Is this decrease merely due to natural causes, or may it be set down to the higher standard of comfort in vogue, or the ravages of alcoholism? And, lastly, granted that certain evils abound, a waning prosperity in agriculture, a desertion of the country, a dulness and dreariness in country life, a decrease in the natality, an excessive love of comfort, a sudden growth in alcoholism, the final question presents itself, What has the school done to lessen these evils, and what can the school do in the future?

Industry.

To take the less important factor first. One of the biggest linen manufactories of France is situated at Lisieux. It employs 1,200 workmen. Another large one exists at Mézidon, with 300 workmen. There are also several woollen and cretonne manufacturers in and about Lisieux. Along the course of the rivers one meets small cotton mills, which employ a certain number of hands. The factories near Lisieux suffered a good deal five or six years ago, but have been doing better lately, owing to the adoption of improved machinery. In a few villages where I came across an artisan alongside of an agricultural population, the contrast was most marked. I was uniformly told that destitution was widespread among the mill hands, while the peasants were nearly always in well-to-do circumstances. The hours of the workmen seem also extremely long. At St. Paterne (Sarthe) the workpeople, men and women, are obliged to rise at 4.30 winter and summer, as the mills at Alençon open at 5.30. They do not return till six or seven, and have only half an hour at nine for breakfast, and an hour at two for dinner. As for the owners, I heard of several

mills that had been closed, as at Ouilly, or were in a parlous state, as in the neighbourhood of Alençon. At Vimoutiers I was shown a fine hall (now only used for corn), that recalled in its size and solitude one of those deserted marts in the Low Countries which were once busy centres of trade. The building in question had served as a mart for *toiles* for all the hand weavers round, but now there are only two weavers left. The same tale was told me by a friend of mine at Lisieux. Formerly on a small estate, now occupied by a single farmer, there lived six households, who each cultivated a small patch of ground, and worked, especially in the winter, at a hand loom, and when the cloth was finished, the peasant took it himself to market. These have now all disappeared, and a similar fate has overtaken the village industries in the neighbourhood of Argentan. The small factory is languishing in its turn. The windmills are abandoned except for grinding barley for the cattle. The water-mills are going the same way. Only the saw-mills hold their own. Another small industry, bootmaking in Ouilly is not what it was twenty years ago. On the other hand, where industries are grouped round an industrial centre like Flers, they appear to be prosperous. The workmen earn 3 francs 25 centimes to 3 francs 50 centimes a day, the women 1 franc 50 centimes to 2 francs. Living, as many of them do, in the villages outside the town, they spend their spare time in gardening and a little agriculture. It is sad to find that the celebrated point-lace of Alençon is also dying out. The cause is said to be, not a falling off in the workmanship, but the prohibitive cost of production, which renders it difficult to find a market. A square yard of it costs several thousand francs, and passes through thirty-two different hands. The only thing really prosperous in the place was a carriage builder's establishment. I was unable from lack of time to inquire into the industries and manufactures of the other departments under observation, nor do these scanty notes represent in any way the total number of industries in Calvados and Orne; but if, as far as they go, they afford any criterion, they certainly bear out the views of anyone who believes in the concentration of industries as a necessary, though by no means a final, step in its evolution, that the severe competition of foreign trusts and amalgamations must ultimately crush out the little manufacturers, even when the latter are sheltered by a protective tariff. The future, therefore, of those small industries in rural France, not enjoying exceptional local advantages or manufacturing special articles which do not figure among the principal items of the world's production, such as cotton or woollen goods, seems either gradual extinction or concentration around local centres which possess the best means of communication and transit. As for the prospects of village industries, they seem even darker. There are no technical funds available in France for attempting to improve the arts and crafts in rural districts. The *travaux manuels* in the schools are practically of little importance; it is only in the higher primary

schools that good work is being done, and here again the pupils are prepared for the big workshop and not for rural employment. The only aid in the long run will be through the evening continuation schools, and by the time these are thoroughly equipped for manual work, it will be rather a question in most districts of reviving than improving these bye products of rural economy.

Agriculture. The peasants who remember the palmy days of agriculture under the Empire will tell you that agriculture is quite a decaying industry, or, at least, a shadow of its former self. This, of course, is true to a limited extent. With the standard of comfort everywhere rising, were the pecuniary yield from the land but equal in amount to what it was thirty years ago, it is plain that the inhabitants of the country would to-day be comparatively poorer off than at that epoch. But

Fall in land values. the break in prices in agricultural produce which took place after 1876 has further intensified the contrast. In every department into which I went there seemed to have been a heavy fall in the value of land, which perhaps reached its lowest point in some of the districts devastated by the phylloxera. This fall does not seem to have been everywhere the same. The professor of agriculture at Alençon estimated it at a third, but on a small estate of thirty-five hectares near Lisieux, I was told the rent, which was formerly 3,500 francs, is now reduced to 2,000. Out of this 400 francs are spent on repairs, and 800 go to satisfy the tax collector.

Taxes. These figures are certainly heavy, and I was informed of a worse case in the neighbourhood in which a peasant who paid 120 francs in taxes for a house and about an acre of orchard, allowed the State to seize his property for arrears of taxes. He now holds the same property at a yearly tenancy of 60 francs. Against this must be set the assertion of a departmental professor of agriculture that the *impôts* are not excessive. An inspector also informed me that the land tax has been relieved at the expense of the house tax. In fact, it rarely exceeds one-fifth of the rent, according to another witness.

The cadastre. In some cases the *cadastre* on which the tax is based seems to want revision. Thus, in certain parts of Burgundy the grand *crus* which were once produced on the hill sides are grown to-day in the valleys. The hill sides are now denuded of vineyards, and are merely laid down in grass, yet they have none the less to pay on the original assessment, which is naturally very heavy. Not a few proprietors have been ruined. In Orne I likewise heard of proprietors whose assessment is not to-day in accord with the comparative value of their holdings. It is possible to get the assessment altered, but the process is long and costly.

Tenure. On the other hand, the system of tenure seems to be far simpler than with us. Mr. Bodley has already written largely on the *ingérence* of lawyers in all forms of business in England, and the complicated machinery they have created more or less for their own benefit.

Transfer. In France, the country of small holdings, where owners are therefore numerous, the transfer of land is, I am told, neither tedious nor expensive, and registration is a very simple matter.

It is interesting to note that despite the long period during which the metric system has been compulsory in France, the common means of measurement in the country are still according to the ancient manner of computation. Thus around Lisieux the land, which is mainly in pasture, is reckoned at so much a *éache*. On estate mentioned above, which is estimated to support ten cows, the *éache*, which was formerly taken at 350 francs, now only produces 200. In Orne the farmers sometimes count by *jours* (equals 40 ares, or about an acre), sometimes by acres of 84 ares, or a trifle over two English acres. In Sarthe there is a measure called a *hommée pré* (which equals 33 ares), or rather more than a man can dig in a day. It looks as if we in England shall reach the end of the twentieth century before the mystic 30½ square yards which forms the square rod, pole, or perch, will have fallen into desuetude.

As regards the size of holdings, they still belong overwhelmingly to the class which we regard as small.* Calvados is not a country of big farms, and in the arrondissement of Vire the holdings are very small. In Orne the majority of farms run from 25 to 37 acres. Farms under 25 acres are called "bordages," or "closeries," which reminds one of the Norfolk "closes." Out of 100 farms, there are on an average three from 100 to 200 acres, twenty-five between 25 and 75 acres, and seventy-two under 25 acres. In Sarthe the number of proprietors runs into tens of thousands, and many of the day labourers have their little patch. Large estates seem to be more numerous along the banks of the Loire, and especially in the châteaux country, which may be looked on as the "Dukeries" of France. But at present there is little sign of the small holders being crushed out by the agricultural depression, as were the Norfolk statesmen in the eighteenth century. On the contrary, at least in Sarthe, the earth hunger is as keen as ever. When any big estate comes on the market it is bought up by a speculator or syndicate, and cut up into small lots, that are at once snapped up by the peasants. The movement towards the formation of large farms seems to have no counterpart in the regions of France under observation. It was in Sarthe, again, that I was told that many farmers, especially in the neighbourhood of Marolles, had bought their farms, which shows that agriculture is not yet played out.

In Calvados, the principal district devoted to the raising of crops is the plain of Caen, every inch of which is carefully cultivated. Corn, of course, is the chief item, though its production is below the requirements of the department. Here at one time one of the most important crops was colza, but the industry has been practically ruined by the competition of American cotton oils. The cultivation of the beetroot is, however, largely increasing. In the pays d'Auge a large part of the land which was once arable has

* According to M. Tisserand, there were in France, in 1894, 6,913,500 cultivators and 3,460,000 proprietors.

been laid down in grass, the peasant only cultivating sufficient for his own needs. The same alteration in cultivation has taken place in the district of Argentan, in Orne, owing to foreign competition. Still, in the last five years the actual production of cereals has increased owing to the use of *engrais*. Around Alençon I was told the same story of wheat going out of cultivation. *Le blé ne rapporte plus* was a common complaint. The cultivation of the beetroot for fodder has, however, given good results. In this neighbourhood most of the crops are now cut with the scythe, the sickle is little used, and here and there peasants have purchased reapers. The most advanced agriculture that I came across was in the Beauce district, a huge plain covered with cornfields, that extends into the north of Loir-et-Cher, and which is often called the granary of France. The corn crop in Sarthe, although the area has been reduced, supplies more than is necessary for its immediate wants; some of it even finds its way to England. In many parts of the department the yield of wheat has doubled owing to a judicious use of *engrais* (being now in the Beaumont district from about twenty-eight to twenty-two bushels an acre*). I have already spoken of the barley of Loué, as well as of the bad habit of the peasants in the district of sowing two successive corn crops. The *métail*, a mixed crop of wheat and barley, of which the peasants make their bread, has also been mentioned, as well as the *mêlarde* with which they feed their cattle. About 155,000 quarters of the former were raised in Sarthe in 1895. The potato is largely grown in the same department. A peasant proprietor informed me he had been the first to introduce on a large scale its cultivation into his neighbourhood, with the result that he now supplies the *caserne* at Mamers. The departmental professor of agriculture stated that Sarthe may be regarded as the potato garden of France. In 1895 the crop amounted to 3,141,078 *quintaux* (about 309,466 tons). In Sarthe also a great amount of lucerne and clover are grown for hay. These artificial grasses prove a serious rival to the natural pastures, which are often mown and made into hay that is sold to the cavalry garrisons or sent to Paris. The same practice largely obtains in the marshes and meadows along the banks of the Loire. This production of dry fodder shows signs of being overdone. In the present year (1900) prices no doubt were high, as there seems to be little or no grass anywhere. But the departmental professor in Sarthe thinks that in the near future a certain amount of the present land under pasture will go back again into regular cultivation. Indre-et-Loire possesses an excellent model in high farming in the agricultural colony of Mettray, a reformatory largely built

* Compared with this, in 1900 Great Britain had a yield of thirty bushels per acre, Russia of nine. The shrinkage of the wheat area in England is severe, being only little more than half what it was twenty-five years ago—Mr. Clare-Sewell Read, "Eastern Daily Press," December 21st, 1900.

and maintained by private charity, which employs a strong contingent of its numerous inmates, who amount to over 400, in working on an estate of about 1,300 acres, half of which is hired land. The estate, thanks to the abundance of hands and a liberal use of manure, has far the best crops in the neighbourhood. The farm superintendent who drove me round the place told me last year he obtained over forty-four bushels an acre in wheat and over sixty-one bushels an acre in oats; which compares very favourably with the yield elsewhere. A good deal of maize is grown in the colony and kept in silos for the cows, who are always tied up. They also go in largely for lucerne, some of which is kept as long as five years. The colony's pastures are always mown, as they are too damp to put cattle on. As far as one can judge in a general way, a good deal of corn land has gone out of cultivation, especially in the districts where dairy work and cattle breeding are profitable. But even in these districts the limit appears to have been reached, while in others, where the peasants do not consume their own hay, it has probably been overdone. One great drawback to better farming is the lack, as the head superintendent said to me at Mettray, of keeping a sufficient head of stock. This, however, may be obviated by the use of artificial manures, which is increasing. People are beginning to see that the ground is like a bank—you must put something in to get something out. Under these circumstances it is possible that in some districts the area under corn will increase, if other untoward factors such as the lack of labour do not become too prominent.

On those grass lands which are not mown and sold for hay, the farmers go in for dairying, cattle breeding, grazing and horse-breeding. In many of these pastoral districts, especially in Calvados and Orne, the meadows are covered with apple trees. This allows the peasant to have two strings to his bow. In a wet year there is plenty of grass and probably a "shy" apple crop; in a dry year, like the present, the herbage is poor, but the apple trees are literally bowed under with blossoms. Many of these valleys are covered with hedges to prevent the cattle straying, which gives them quite an English look. These enclosures, at least in the pays d'Auge, have the name *cour*, which is derived directly from the low latin *cortem*, as may be seen in such local names as Avricourt. The fault of the farmers seems to be that they cannot make up their minds whether to definitely take up the breeding of cattle or dairy work. Hence they sometimes fall between two stools. This is also the district in which Camembert is made. The cheese takes its name from a small village two and a half miles from Vimoutiers, in Orne. The Canton of Vimoutiers exports a million cheeses, but Livarot and Pont l'Evêque, in Calvados, are also equally important centres; the value of the high-class cheeses produced in Calvados alone amounts to about £320,000 a year. Some years ago the Queen's dairy people came over to study the making, but the real secret, as a large cheese merchant said to me, lies in the richness of the pastures,

Dairy farming and cattle breeding.

grazing.

The chief grazing grounds of France are in Orne, which is one of the mainstays of the Paris meat market. Prices, however, have declined a good deal of late years. They were once as high as fifteen to eighteen sous a pound, and are now at eleven to thirteen at the *abattoir*. Many of the cattle are not bred in this department, but are sent there to be grazed, whence they are dispatched to Paris, and even to England. The English race of Durhams is much used as a cross for breeding purposes. The foot-and-mouth disease (*la fièvre aphteuse*) seems unfortunately to be pretty widespread. I came across it in the *vallée d' Auge*, and again in Orne and Sarthe. The measures taken for its prevention do not seem to be so severe as with us. The farmer who discovers it on his place is at once obliged to inform the mayor, who proclaims the commune as infected and calls in the veterinary. The prefect can, if he likes, prohibit fairs and fat cattle sales. This is not infrequently done in self defence by the neighbouring departments, but the selection of the commune as the quarantine area, in the first place, seems somewhat small. The disease appeared also to be prevalent in Indre-et-Loire; as the superintendent of the farm at Mettray told me, he disinfected the road every time the cattle had to pass from one side of it to the other. The cows on the latter place were either Holland or Brittany. The latter, however, always ran to fat on the rich fodder of the colony. The best sheep I saw were also at the colony, where there is a race of Berri sheep crossed with English Southdowns. There were likewise a goodly number of pigs kept. To judge from what I saw and heard, those who seem to be engaged in butter and cheese making, or in breeding and grazing, seem to be fairly prosperous everywhere, except where the *fièvre aphteuse* is prevalent.

horse breeding.

One of the chief centres of horse breeding in France is Orne, in which there are three principal races—the *percheron*, or draught horse; the *cheval breton*, a horse of a bigger type; and the *cheval de Merlerault*, a cross between the Norman and English breeds. Every year there are two horse fairs in the department, one at Alençon and the other at Le Mêle. There is also a fair at Saint André de Mortagne, which is the largest in France for brood mares. The stud farm of Le Pin, with its celebrated cavalry school, is also situated in the department, which is one of the most important for raising horses for the remount. The Government gives premiums for *demi-sangs* but not for *percherons*, which apparently is considered an omission. The peasants do not break in these "half-breds" themselves, but bring them to an *école de dressage* at Alençon. I had a conversation with a farmer who breeds horses of the *percheron* type, and carried off last year all the first prizes at Mamers. He seemed to think breeding a profitable pursuit, and this opinion was borne out by that of the departmental professor for Orne, M. Langlais.

minor industries. Fowls, eggs.

Calvados, of course, is noted for its large trade in fowls and eggs. No less than 20,000,000 francs worth of the latter pass every year through the port of Honfleur, their destination being England.

Le Mans, in Sarthe, is also a great centre for the poultry trade, as well as La Flèche; 250,000 head of poultry and 100,000 geese are sent annually from this region to Paris, which also produces some 10,000,000 eggs. A large consignment of fowls from the same district finds its way at Christmas into Leadenhall Market. At the "colonie Mettray" I came across two large poultry farms which have an enormous output of fowls and eggs. In many cases the poultry farm is looked on as the woman's work, and the vast majority of peasant families do not neglect this useful means of supplementing their income.

I came across market gardening in one or two villages, notably at Montlivaut, in Loir-et-Cher, which, with a population of only 680, exports wines, asparagus, French beans, and potatoes to the tune of £8,000 a year. Bee culture exists in certain parts, notably in the Sologne, which occupies the south of Loir-et-Cher, and abounds in marshes and ponds. It corresponds roughly to our Broadland, and once contained over a thousand sheets of water, though many of these have now been drained; it possessed, in 1895, 6,608 hives, producing 46,953 kilos of honey and 12,698 of wax. Sarthe is also a great country for bees, containing no less than 13,000 hives, which in 1895 furnished 76,052 kilos of honey and 16,925 of wax.

Calvados and Orne are two of the great cider-making departments. In fact, Calvados is the second cider-producing department in France, producing about 2,000,000 hectolitres — equal to 44,000,000 gallons. Much of the grass land in these departments is planted with apple trees, and some of the arable land as well. In Orne, where the trees number about 3,000,000, they are often planted along the roadside or in the hedgerows. The cultivation of the apple seems to be extending, and in many places I saw quite recent plantations. The present year, 1900, was an exceptional one for apples; the late frosts, which generally do much damage, did not put in an appearance. A tree which had not a fine show of blossom was a rarity, and many orchards, notably those near Trun, were a marvel to see. The cider varies naturally a good deal according to the localities. That of the pays d'Auge is perhaps the strongest, but the Parisians prefer the lighter kinds, which are produced in Orne. It is from the pays d'Auge cider that the *eau de vie de marc* is generally distilled, often by the peasants themselves. The orchards continue into Sarthe, where the vine culture begins, and even further into Indre-et-Loire. The Germans appear to be directing their attention to cider, as in 1899 they came into the market and bought up 200,000 hectolitres of apples to take away to make into cider. The promise of the spring has resulted in a bumper crop of apples, which are also of excellent quality. Agriculture may be in a distressful condition, but the apple growers and cider makers will not have cause to complain this year (1900).

The first vines I came across were in Sarthe. Its production in wine amounted to 61,473 hectolitres in 1895. Although the phylloxera

at one time caused immense damage in this department, destroying in one year over 2,000 hectares out of 9,000, the peasants were not ruined, as in some districts, because they had several strings to their bow in the shape of other kinds of cultivation. Now that replanting with American vines and regrafting of the former *crus* on the new stock is a thorough success, the country has everywhere largely regained its former prosperity. In Indre-et-Loire, where the vine is one of the staple products of the department (721,000 hectolitres in 1895), the case was far more desperate. Here again, however, the corner has been turned and the wine-growers are everywhere retrieving their position. The valley of the Loire itself is too exposed to frosts, owing to its dampness, to allow of successful culture, but the hills that line either bank are everywhere being replanted. At Mettray there were no less than 60 hectares under cultivation, which produced a very handsome return last year. A cultivator at Noizay seemed well satisfied with his vines, and said it was the only thing that paid. In Loir-et-Cher, which is also largely a vine-growing department (624,250 hectolitres in 1895) the country was at one time devastated by the phylloxera. A regular emigration set in, and the peasants forsook the rural districts *en masse*. Thus, at Saint-Denis la Vieville during the phylloxera scare many of the young able-bodied men left the village, with the result that the population has fallen from above 500 to 458, and of this population there are only nineteen boys of school age in the place. Now, however, the worst is over, and in many villages I stopped at I heard of nothing but progress. Replantation is going on in all directions, and the present year, which has provided such a bumper year for cider, should also turn out a record one for the vine (1900).

The wood
cutters.

The majority of the inhabitants, who are not engaged in agricultural or industry proper, are employed in such various employments as brickmaking, coalwinning, quarrying, etc.;* a certain proportion likewise find occupation in the numerous forests which lie more or less on the watershed between the Seine and the Loire. Several of these forests are very considerable in extent. In Calvados they occupy one-twelfth of the department, in Orne one-seventh, in Sarthe one-seventh, and in Indre-et-Loire one-sixth, and in Loir-et-Cher one-fifth. In the forest of Perseigne, between Alençon and Mamers, the *bûcherons* work by the piece, and gain about 4 francs a day. The makers of *sabots* gain from

* Along the coast of Calvados there is a good deal of fishing. It is worth noting in connection with this that technical education in the shape of an *enseignement maritime* has been started for children in some seaside places. They are taught the meaning of the different flags and their use in signalling, the compass, the phases of the moon, the *rose de vents*, or the different points the wind blows from, the various rigs, and the names of the principal sails, ropes, etc., with lessons on reading charts, assistance to the drowned, and practical work in reefing and knot-making (for further details see an exhaustive article on the subject by M. Coutant (Inspecteur Général) in the *Revue Pédagogique*, June, 1901).

2 francs 50 centimes to 4 francs a day. Through the kindness of Mme. Leffroy, the wife of the teacher at Neufchâtel, which lies on the edge of the forest, I came into possession of a sketch by her husband and herself, which had been prepared in view of the Exhibition. It gives an interesting account of this minor industry and furnishes some very useful data about the budget of a family of *sabotiers*. The father and mother and two sons earn together 2,270 francs a year, or over £90. Apparently these people are not badly off, yet it is from their ranks that the emigration to the towns seems to be most pronounced.

Much has been done of late in France to encourage and assist agriculture. The rôle of the departmental professors of agriculture and of the special professors has already been explained. Allusion has also been made to the agricultural laboratories which enable the agricultural professors to do so much in the way of analysing soils, and suggesting the proper manures, as well as analysing those which the peasants suspect to be not up to sample, not to mention the research work which also goes on in them. Each departmental professor, to be fully equipped, should have one of these arsenals of science at his disposal. The small proprietor is further favoured by the system of protection, which keeps the price of wheat up to a certain level, while in many departments, notably in Orne and Sarthe, a large number of light railways and tramways have been constructed, which have not only proved invaluable for bringing isolated country districts into touch with the big markets such as Paris, but have also, at least in the Sarthe, proved a profitable source of investment to local capitalists. That, for instance, from Le Mans to Loué and Saint-Denis-d'Orques, brings in 7 or 8 per cent., and the shares are practically unprocurable. In the same department, only last year, two new steam tramways were built, which, after a certain number of years, may become the department's property. It is only fair, however, to add that these undertakings are not always so remunerative. In Indre-et-Loire I was told the department had to make up a considerable difference to complete the dividend it had guaranteed. But in these days, when cheap means of transit are even more important than tariffs, a country cannot do too much to improve its internal means of communication, and this system of putting down light railways or tramways under the guarantee of the county council, if exercised with caution, might do much for out of the way districts in England. Only a light railway must mean really a light railway, and not, as has sometimes been the case with us, a line that a Great Northern express can safely run over at a pinch.* The Loué line, for instance,

What has been done for agriculture.

Agricultural special professors. Laboratories.

Light railways.

* I have to thank M. Cassarini, the departmental professor of agriculture of Sarthe, for the following particulars. The cost of a narrow-gauge railway comes to about 40,000 francs a kilometre—about £2,560 per mile; this includes the rolling stock. The preliminary expenses for a line of about 50 kilometres, including the cost of survey, getting leave to construct, etc., may come to about £2,400. The land can be com-

often runs along the main road. There is no pretence at fencing. Its stations are of the simplest order, and a single woman is station-master, booking-clerk, porter, and signalman rolled in one.

comices agricoles.

The third main encouragement that agriculturists find in France are the *comices agricoles* and the *syndicats*.^{*} Some of these, I was told, were formed for political purposes,[†] but if politics serve the cause of agriculture, there seems to be little cause for complaint. All the good that such societies do is a positive gain. The *comices agricoles* devote their attention to agricultural shows or competitions for the best-kept farms or the finest crops among the cultivators. The *syndicats* are principally formed for making purchases on the co-operative principle. Every department possesses at least one *comice*; many of the *arrondissements* have also their own, and sometimes the cantons have separate societies as well.[‡] In Sarthe alone there are no less than twenty-eight, which gave away last year over 30,000 francs in prizes. Mention has already been made of the encouragement given by these associations to the primary schools by the institution of competitions for teachers and pupils, as well as of school exhibitions.

syndicats, three sorts.

As for the *syndicats agricoles*, they may be divided into three categories ||: Those for the purchase of *engrais* and implements on co-operative lines; those for the purchase and mutual use of pedigree bulls and rams, to improve the breed of their live stock; and, thirdly, the mutual societies for insurance against the cattle plague or loss by hail. The *syndicats*, according to the agricultural professor of the *arrondissement* of Mamers, are growing at a great rate, more especially those for the purchase of *engrais*. There is keen rivalry among the various *syndicats*, each trying to supply its members at the cheapest price. This opinion was also confirmed

pulsorily acquired by arbitration before an expropriation jury. If the line is called "line of local interest," the sanction of the two chambers is needed; if it is called a tramway, as most of these railroads are called, it merely requires a decree. The speed is limited, when the side of the road is appropriated by the line, to 15½ miles an hour; across the fields it is not limited, but the companies in Sarthe limit it to 22 miles an hour. In England, as far as I can ascertain, the cost of construction is higher.

^{*}The number of these syndicates for all France is about 2,500, containing over 800,000 members.

[†]See also Elie Coulet, "Le mouvement syndicat et co-opératif dans l'agriculture française." This, however, is denied by M. le Comte de Rocquigny in "Les syndicats agricoles et leur œuvre."

[‡]These small local shows are not unknown in England. The Norfolk Agricultural Competitions are subsidised by the County Council, organised in Union or County Council districts, and run by voluntary secretaries. One of the best known, in the Freebridge Union, has rendered "yeoman" service to agriculture.

|| According to M. le Comte de Rocquigny, they are also formed in other departments for the reconstruction and defence of vineyards, for the co-operation of consumption and production, for agricultural banking, for other cases of assurances than those enumerated above, for old-age pensions of various kinds, and for labour bureaux.

elsewhere. Some of the *syndicats* are of immense size,* that of the *Syndicat d'Agriculteurs de la Sarthe* has 10,000 members. The teachers in Orne have greatly aided the movement by founding small village *syndicats*, called "*Cercles Agricoles Locaux*" for practising co-operation on a minor scale.† According to M. Langlais, Departmental Professor at Alençon, the *modus operandi* of the second type of *syndicat* is as follows:—The associates club together to buy a pedigree bull, as often as not procuring it in Manche, which is a great grazing department. The animal costs from 350 to 600 francs. The expense is defrayed by the associates paying a levy, which varies between 2 and 5 francs, in some parts rising as high as 7 francs, this subscription giving them the right to the use of the bull.

Of the third type, the most common variety is that of the mutual societies which insure against the loss of cattle by disease. The following are the chief rules, taken from a regulation form much in use in Orne, and recommended by the *Syndicat des Agriculteurs* of the department. As soon as the Society is constituted, a commission visits the farm of each member and estimates the amount of stock his farm can contain in its bullock-sheds and cow-houses. If an animal is ill, the owner must at once inform three of his nearest associates. In case of loss the society pays 70 per cent., deduction being made for what the carcass may fetch. The society is affiliated to the *syndicat* of the department. Losses are paid by a proportional levy on the assessment of each adherent. Mutual
assurance.

Another form of the same type are the societies which insure against damage by hail, which are not so widely patronised as they ought to be. I came across two severe instances in which the damage thus done was exceedingly great, and in both cases the sufferers were wholly uninsured. At Chauffour (Sarthe) last year (1899) the growing crops of the commune were completely destroyed by hail. One proprietor alone lost 7,000 francs; others were nearly ruined. The State had to intervene and gave a subsidy of 1,320 francs; the department did the same, the proprietors forewent their rent, and so all managed to pull through. The other instance was at the *Colonic Mettray*. Here I could judge for myself of the damage done. The standing corn was cut and beaten down by the hail. Those of the vines which were thatched over with straw covers naturally escaped, but the others were literally stripped of every leaf they possessed, and many of the young shoots were snapped right off. The owners round, who, for lack of labour, could not adopt the straw fencings, may expect nothing from their vines for the next two years at least.

* The "*Bulletin du Syndicat des Agriculteurs de l'Orne*" has a monthly circulation of 8,000.

† There are, roughly, four sorts of *syndicats*, represented in the first degree by the *Cercles Agricoles Locaux*, in the second by the departmental *syndicats*, in the third by the regional *syndicats*, and in the fourth by general *syndicats*, whose headquarters are in Paris.

considerata
co-operation.

What is specially wanted in the districts I visited (and quite as much so in England) is co-operative selling among the farmers. These "syndicates," which render such services in the purchase of manures and implements, should also extend their operations to the merchandising of the produce of their members. The smaller the landholder, the greater the need of defence against the extortions of the middleman. The peasant with only 10 combs of wheat to sell has a smaller market than the farmer who offers a big sample. For lack of co-operation the cultivation of colza has been ruined in Calvados; for lack of co-operation some of the most famous butters in Normandy have lost the position they once held in the market, owing to the difficulty to the public of being sure of securing a butter of a certain quality. On the other hand, in Indre-et-Loire there exist co-operative societies for making and selling butter, with the result that the Touraine butter has already won for itself a name in the market. These people are only copying what has already been done in Finland, Denmark, and Holland, and what has just been started in Ireland. But the peasant proprietor in France, as far as I came across him, like the farmer in England, is generally independent. Economic ideas, like those on fashion, manners, or politics, usually filtrate down in a more or less general fashion through a whole nation before they are finally eliminated or absorbed, and the particular stage of economic development at which the French or English farmer seems to have arrived is that of ultra-individualism, which is one of the blessings that the school of *laissez faire* have bequeathed us, together with its legacy of so-called free competition. The strong man in such a business looks on his calling as a game of all against all, and therefore is firmly convinced that he will do best on his own bottom. An alliance with the weaker, in his eyes, is a source of weakness. He does not believe in the strength of numbers. He does not see that he would do better if he went in for co-operation because such a position would enable him to dictate terms to railway companies, effect many economies through handling the associates' merchandise in large parcels, and, above all, better control market prices, and at the same time see that the wares of the association are properly, in these days of advertisement, placed before the public eye, and the public attention drawn to them. But as long as co-operation appears to such people, not as the best way of making the best price of their produce, but as a means of getting rid of what is more or less unsaleable, the movement in its favour is likely to hang fire whenever it is proposed. I was indeed, so surprised to find so comparatively little co-operative selling in the parts I visited, that it seems not unlikely it may be more developed in other parts of France.*

The labour
question.

But what appeared, after all, the most serious impediment to rural prosperity is the growing deficiency in labour, which is, as with us, becoming every day more intense. One of the reasons

* See Chapters VI. and XI. in "Les Syndicats Agricoles," already cited.

that so much land has been laid down in grass in certain *pays* is the difficulty of finding sufficient hands for tillage. This has specially been the case round Lisleux, where the ruin of the hand weaver led to a general exodus. I met with the same complaint in Orne, where a farmer told me he had to give up sowing roots for lack of obtaining labour. The deficiency varies naturally according to localities, but it must be serious enough in some districts for a special professor of agriculture to say to me, "*Le manque des bras, c'est la plaie du pays!*" I was also told by another departmental professor that certain parts of Aisne have gone out of cultivation for the same reasons. In connection with this an Englishman may wonder by what means the farmers secure a sufficiency of extra hands at harvest. The difficulty is partially solved by the influx of foreign labour†, and partially by the action of the Minister of War, who allows all conscripts who are sons of peasants to obtain leave of absence from their military duties in order to work in the harvest fields, for which they receive pay. Those soldiers who are not the sons of peasants can get permission from 5.30 till the hour the barracks shut to go and help the peasants in the neighbourhood. To see that they arrive at their destination, they are generally sent with a *sous-officier* in charge. The men look on the matter as a sort of outing, and the peasants are highly content.

As regards the women, I was told in some districts the female servant difficulty is beginning to make itself felt. The following wages (which are rather high and include board) of servants at one of the *écoles normales* may be of interest. The cook gets £20 a year, the *lingère* £14 and a little over, the scullery maid a little under £10. "Generals" in the towns get a pound a month.

This question of the lack of labour brings us, in fact, to the capital question of the country, namely, the question of depopulation. According to the official figures issued for the year in November the number of births for the whole country was only 847,627, or 10,000 under the average, and the deaths amounted to 816,233, or an excess of 31,398 above the average. The increase for the year is only about 30,000. Again, according to the last census, the thirty-one departments in which an increase is noted contain either the big towns, or are to be found in Brittany. In nearly all the rural departments there is a serious decline. This seems at any rate the case in the departments I visited. Thus Calvados, which in 1801 had 452,000 inhabitants, had only 428,945 in 1891, and 417,176 in 1896. Orne in 1891 had lost 41,351 since 1801, and 38,139 since 1876. In 1896 there was a further diminution of 15,225. Sarthe in 1896 had gained 44,256 since 1801, but

† M. P. Déghilage states that this immigration of harvest labourers is practised on a large scale. In the east it is the Swiss and the labourers from Luxemburg; in the Beauce, the Bretons; in the north, and even down to Champagne and the Ile de France, the Belgians. (*La Dépopulation des Campagnes.*)

in comparison with 1860 it had diminished 40,536, and the rate of decrease seems almost as rapid as in Orne. Indre-et-Loire has gained 20,042, but other statistics show that the population is on the decline (births, 1894, 5,862; deaths, 6,647). Loir-et-Cher has gained 61,240 since 1801, but even here there are appearances that the population is stationary if not declining. Still it is evident, that the rate of decrease varies greatly; if considerable in Calvados and Orne (where, I am told, the loss is from 15,000 to 17,000 every census, one arrondissement alone losing 3,000), it is probably less in Indre-et-Loire and Loir-et-Cher. I took note of the population of a good many of the villages I visited. In one or two it was on the increase, in several it was practically stationary, but in the majority of cases there was a decrease, the proportions of which were at times alarming. At one village near Lisieux the number of inhabitants has fallen from 150 to 84. The *curé*, who had only 400 francs, with 200 francs *indemnité*, with practically no fees for births, deaths, or marriages, had been unable to make ends meet, and so had left. The church was closed, and the inhabitants linked for ecclesiastical purposes to another parish. But local prejudices are strong, and as they cannot have a church of their own they will not go elsewhere. Men's sentimental attachment to their parish and to its *genius loci* is rooted in the associations of a very ancient past.

The causes of
this:
(1) Emigra-
tion.

What are the causes of this depopulation? They seem to be two—emigration and the low birth-rate. The emigration itself varies. In Calvados, which is mainly a rich department, the Secretary to the Academy Inspector assured me that there was no rural exodus; the people generally were too comfortable to move. His opinion was confirmed by a cheese manufacturer of the Pays d'Auge, who denied there was an exodus; if anything, there was an influx from the poorer neighbourhoods in his district. All the people were well off; even the labourers could indulge in little luxuries. Sometimes the emigration is only temporary, as that of the masons who inhabit Carpiquet (Calvados), who had gone to work at the exhibition, and would return after its demolition. Still, there must be some who go and never come back, for the director of the religious school at Alençon told me it was estimated there were 200,000 Normans at Paris. The effect of the phylloxera outbreak on the rural exodus in Indre-et-Loire and Loir-et-Cher has already been mentioned.

A point
where the
tide is
slackening.

But the general opinion seemed to be in many places that the exodus is slackening, that at least the sons of the peasant proprietors no longer leave the countryside in such large numbers. This was brought home to me in numerous instances. No doubt the want of hands, the difficulty of letting one's land, may cause a certain number of parents to keep their sons on the land. But the peasants themselves told me the same story; one whose hospitality I enjoyed declared to me that Paris had not the same attraction as formerly. A peasant's son could become a lawyer's clerk (the glamour of the

black coat!), but what did that bring in? If one's son was in such a position at Paris, it was always necessary to keep sending him money. The cultivators round him (and he cited several names) now keep their sons at home.

It seems pretty certain, therefore, in districts where the land is fairly productive, that those who possess a stake in the country in the shape of a holding remain, and it is principally the landless men who leave the villages. What is the reason of this emigration?

In the first line comes perhaps the question of higher wages which attract men in all countries to labour centres. I took the trouble to ascertain, in the various districts I visited, the wages of the ordinary labourer in the country districts. In the Bessin, as the Bayeux district is called, they range from 1 franc 50 centimes a day (probably with food and drink). In the plain of Caen the harvest wage is six francs a day or *à forfait*. In the arrondissement of Pont l'Evêque the ordinary pay is 1 franc 50 centimes with food and drink; the harvester is paid 5 francs a day. In the Pays d'Auge the rate per diem is at 3 francs, or 2 francs with food and drink, round Vimoutiers 3 francs without food; in the neighbourhood of Alençon 2 francs 50 in winter and a little higher in summer; at Mamers 1 franc 50 centimes with food and drink, or 2 francs without. One point on which I am doubtful is whether employment in the country can be obtained all the year round; but then is the unskilled labourer in Paris always sure of regular work? His pay according to a friend of mine, M. J. Manchon, who made careful inquiries, is 5 francs a day. This corresponds with the average of M. P. Déghilage, who says 4, 5, or 6 francs a day. A workman's lodging at Belleville, under the eaves, costs about 100 francs; but it is almost unendurable in summer, and deadly cold in winter. M. P. Déghilage says in the Cité Jeanne d'Arc five or six people are crowded into a single room, which costs 3 francs 50 centimes a week; this works out at 182 francs a year. A cottage in the country with a garden costs 60 to 80 francs, at least I saw several at that figure. Food again is dearer in Paris, owing to the *octroi*; firing is likewise more expensive. Besides, every kind of vegetable food has to be purchased, whereas the cottager has nearly always a small garden and perhaps one or two fruit trees. It is indeed a moot point whether the Parisian workman is better off than his fellow in the country. A great authority on the subject, M. Deschanel, asserts that "a workman who in the country earns two francs a day and his food has relatively more than one who earns 5 francs in the town." But the mere difference in apparent wages is probably quite sufficient to account for the pecuniary attractions of Paris, especially if one takes into account the tales of fortunes made in Paris which are current in the villages. One never talks of the failures. Among these lower-class emigrants it is only fair to state that a large percentage go to Paris with a view to adopting a definite, if humble, calling among the hewers of wood and drawers of water of the great metropolis. Thus the new-

Causes of
emigration
(a) Higher
wages.

comers from Orne, who belong mainly to the country districts, become either servants or *rôtisseurs*, or hawkers, or sell butter and vegetables. Many, when they have made their little pile, come back to their native village, but their children, as a rule, remain at Paris. So the loss to the country is the same.*

Other centres of attraction. But Paris is not the only centre of attraction. In some districts Paris has ceased to draw, and the emigration is rather to the urban centres in the department. Again, in the *château* districts, many of the young men desert the village to take service under the owners of the *châteaux*. To combat this drain on the rural population, the only sound policy is to do as one peasant proprietor said to me, to pay the labour well. The best paid men are worth more in the long run than the badly paid. But how many farmers in either country are ready to take this hint?

(b) Other causes of attraction. Unfortunately, however, the problem is not merely economic. There is also the question of the greater attraction of town life. Lord Salisbury's humorous remedy of a circus in every village might equally gravely be proposed for enlivening the country life in France. Again, there is the attraction of greater independence and freedom from observation. In the French or English village everyone is under the eye of his neighbour and the police, and the morals of the village very often largely depend on the virulence of language with which the village gossips are dowered. Those who find these inquisitorial methods too unpleasant are prompted to seek the comparative freedom from observation which prevails in the towns.

(c) Conscription. But one of the chief factors in accelerating the emigration to the towns is the prevailing system of conscription. "Half the conscripts never come back to cultivate the soil, once their time is up." —(M. P. Déghilage.) The *caserne*, or rather its surroundings, has undoubtedly the effect of initiating the peasant into the coarser attractions of the town. On his return to the country, he misses the factitious excitement he enjoyed when with the regiment, and finds country life too dull to be endured. It is clear then that the recreative side of the school continuation work is most important. This is not the place to discuss the pros and cons of conscription, but one fact may be cited to show the immense burden it is, not only to the country, but also to individuals, and especially to those who live in the country. During the three years' service of his son, a peasant proprietor is obliged to work hard, and take a labourer into his pay, at a cost of 1,000 francs, to take the place of his son, while he is further obliged to send the latter 500 francs to keep him. This means that the three years' service costs him something like £60 a year, and explains a terrible remark I heard of, made by the father of a son who had been rejected from the service for some physical defect. "After all, he will not be a soldier, but he will always be able to drink and work!" An inspector suggested that the evil influence

* *La dépopulation des Campagnes*, Paris: E. Nathan, 1900.

of the conscription in tempting the people into the towns would be largely obviated if, instead of being mainly regional, with the exception of Paris and Lyons, whose recruits are sent all over the country, the conscripts were sent to those parts of France which are furthest removed from their own department. They would then be completely *dépaysés*, and their one desire would be to get back to their native village as soon as their term of service was over, whereas at present they are merely sent to the *chef-lieu* of their own or a neighbouring department, in which they naturally find themselves at home.

The second chief factor of the rural depopulation is the low percentage of births in France, which for the whole country is only twenty-two per 1,000, against about thirty-five for England and Germany* (P. Déghilage). In many departments it is actually below the death rate. Thus in Calvados (1893) the births were 8,924 and the deaths 9,951; in Orne (1893) 6,140 and 8,476; in Sarthe (1897) 8,500 and 8,983; Indre-et-Loire (1894) 5,862 and 6,647; and in Loire-et-Cher (1895), in which alone there was a slight increase, 5,541 and 5,404. Here again conscription exercises a certain influence. In unsettling the young it renders them less inclined to marry. The code of morals which obtains in the regiment is not exactly propitious to matrimony. Again, the young soldier after his three years' service has still his month's training every year. During this period, if he is married and has a family, they have to be somehow clothed and fed, although the father is practically out of work during the period. Such a prospect is not calculated to induce early marriages.

But a more important reason is the love of comfort (*bien-être*). Except in Brittany and some of the poorer departments in the South (Hérault), families of three children are an exception in rural districts, and the only child is almost the rule. A large family spells for the parents a return towards *la misère*, while for the children it means the splitting up of the family substance into equal parts. A witty Frenchman, in speaking of our system of primogeniture, has said that it restricts the creation of fools to one per family. The automatic partition of property, which was dictated by certain ideas of abstract justice, has certainly done an infinitude of harm to France. It deprives many children of the stimulus to self-exertion, it has helped to set up the false ideal of the *petit rentier*, it has encouraged the unhealthy preference that has declared itself among the younger generation in favour of acquiring some wretchedly paid but certain post under State employ, to the following of more lucrative careers in trade or industry at the personal risk of those who adopt them, and above all it has proved a formidable check on the increase of the population, which is perhaps the greatest ill it has occasioned.

* This refers to 1881-1891. The birth rate for England and Wales, 1891-1901, shows a reduction of 2.67.

(2) Low birth rate.

Causes:
(1) The *bien-être*.

(2) System of inheritance.

3) Alcoholism.

Another serious cause of depopulation, which was most manifest in the districts I visited, was the growth of alcoholism. As M. Baudrillard says in his "*Histoire d'une Bouteille*," "the depopulation of the country districts is one of the aspects, and that not the least sad, of the question of alcoholism."

Fifty years ago France was one of, if not the most temperate of, the countries of the world. To-day it stands at the head of all the countries in the world as the greatest consumer of alcohol under its various forms. According to the statistics given by M. Baudrillard,* France consumes annually 14 litres of pure alcohol at 100° per head, against 11 for Switzerland, 10·50 for Belgium, 10·22 for Denmark and Italy, 9·33 for Germany, and 9·23 for England, the three lowest on the list being Sweden, 4·39, Norway 3·31, and Canada 2·03; that is, the consumption in France is half as much again as in England or Germany, and nearly seven times as much as in Canada.

The causes.

The reasons for this alarming change are several. One, which sounds paradoxical, is the failure of the wine crop during the several years that followed on the invasion of the phylloxera. In 1873 the consumption of wine was 199 litres per head, in 1885 it only amounted to 75 litres.† This proved the opportunity for the distillers of alcohol from beetroot, molasses, and potatoes, as well as later on for the manufacturers of absinthe and other so-called *aperitifs*, to flood the empty market with their productions, many of which are little better than active poisons. Between 1875 and 1897 the consumption of spirits in France has practically doubled (2·82 litres pure alcohol per head to 4·54),* while the consumption of absinthe, which stood at 85,000 hectolitres in 1885, was double seven years later, in 1892, and quadruple four years later, in 1896.* A second reason is the growing practice of every wine or cider grower to have his own private distillery, where he can manufacture at his ease all the *eau de vie* he desires, either from wine or cider. These *bouilleurs de cru* total at least 700,000,‡ and their number is growing. Unfortunately no Government seems strong enough to dare to put it down. It has none the less encouraged the habit of constant drinking, which may be regarded as another cause. In some parts of France the peasants take coffee four or five times a day and always put a strong dose of brandy into the coffee, so strong that at times it is rather brandy with coffee than coffee with brandy. Through the kindness of the teacher's wife, Madame Leffroy, at Neufchâtel (Orne) I am able to give the following typical budget of a *sabotier* and his family of three persons, who earn in all over £90 a year.

* M. Baudrillard's "*Histoire d'une Bouteille*." Paris: Legrain, 1900.

† Legrain and Pérès, "*l'Enseignement anti-alcoolique à l'Ecole*." F. Nathan, Paris, 1899.

‡ The Parliamentary return on alcoholic beverages furnished by the Board of Trade (12th August, 1901) puts their number at 925,910, of whom 552,537 carried on operations in 1900.

Clothes, Rent, etc.		Food.		Drink.	
	Frcs.		Frcs.		Frcs.
Clothes - - -	350	Bread - - -	430	Fruit to make cider -	100
Rent - - -	80	Milk - - -	50	Cabaret, fête days, etc.	100
Taxes, assurances,		Butter - - -	60		
repairs - - -	25	Grocery - - -	30		
Light - - -	50	Fruit - - -	100		200
Benefit society -	12	Fish(salt her-			
Debt paid off -	100	ring) - - -	10		
Pocket money to		Poultry - - -	80	Coffee and eau de vie -	300
his boys - - -	50	Meat - - -	90		
Miscellaneous -	30	Other articles			
Savings bank -	123	of food - - -	100		
	820		950	Total - - -	500

It will be noticed in the budget of this otherwise frugal family about one-fifth (deduction made for the coffee) is spent in drink.

The constant habit of "nipping" is so prevalent at Rouen that in a workshop of 150 men the master declared he only knew of five he dare send into the town to effect repairs.* The others were certain to go on the spree. Constant drinking naturally leads to heavy drinking. "In Calvados, at Flers and Falaise, the workmen drink as much as a litre of cider brandy a day, and they drink it in big glasses, as we do water."* It actually takes the place of food. At Rouen, the dock labourers earn 3 francs a day. "They spend 4 to 8 sous on food; the rest goes in infernal liquors."* Even among the workmen the morning breakfast consists of slices of bread served in a soup tureen containing a litre or half a litre of spirit; the coffee even is left out.* The same soup is not infrequently served as well for the evening meal. And this is the fare on which the children are often brought up.*

Fourthly, the *cantine* at the regiment has no doubt been the cause of encouraging the drinking habit in the young conscripts, especially as the favourite beverages were until recently absinthe and other deleterious liquors. The evil has been fully recognised by those in authority, and lately an order was issued by General Gallifet forbidding the sale of all kinds of spirits in the regimental *cantines*, which is certainly a most useful reform. And, fifthly, another reason of excessive drinking is the inordinate number of *cabarets* which abound, there being no licensing committee to limit their numbers. In 1875 there was 1 to every 109 inhabitants in France, in 1885 there was 1 to every 94 (omitting Paris). In the Seine Inférieure there is, however, 1 for every 66, while at Alençon the percentage is still higher, there being 290 *debitants*, or 1 *débitant* to every 51 inhabitants, or to every 17 men. These figures are only surpassed by the department of the Nord, which has one *débitant* to every 46 inhabitants. The other figures connected with Alençon were equally disquieting.

* All the above facts are taken from an article in the "Temps," quoted by Legrain and Pères.

In 1889 the number of litres consumed of alcohol at 50 per cent. was 16·74, and in 1889 21·4 per head yearly. The contribution of each inhabitant of Alençon to the *régie* passed from 16 francs 52 cents. to 18 francs 32 cents., or, if adult males only are reckoned, from 49 francs 56 cents. to 54 francs 96 cents. per head per annum. The profits of the trade are best seen from the following figures :—

	Cost price.	Sale price (in petits verres).
Absinthe per litre -	3·75 (including excise) -	7·50
Workman's brandy (The exact title.) -	1·30 (including excise) -	2·00

Happily the evil seems to decrease as the wine districts are approached. On the alcoholic* map of France, Calvados figures among the most affected, with 9 to 14 litres (pure alcohol) per head. Orne is in the second class with 6 to 9 litres, Sarthe, Indre-et-Loire, Loir-et-Cher, the fourth, with 2 to 4, while the departments to the south-east consume actually less than 2 litres per head.

Effects.

The consequences of this excessive drinking on the vitality of the nation are already showing themselves in the low birth-rate and the increasing defects in the physique of the new generation. The drinking, is unhappily, not confined to the male sex. Thirty years ago the proportion of habitual drunkards in Lille was 25 per cent. male and 12 per cent. among the women.* "Little by little," says Jules Simon, "they become fond of it, more fond than the men." In certain cantons, it is by hundreds that one can cite the female drinkers who absorb one-fifth to one-third of a litre daily."* Absinthe intoxication among women, according to Lancereaux, is, without exaggeration, 'as frequent as among men. The result is, according to one of my informants in Orne, that the women rarely have children after thirty. Of those who are born many are rickety and have feeble constitutions. In the Northern departments the number of recruits unfit for military service has become six-fold between 1874 and 1888. The same statement has been made of Normandy.* According to M. Rotureau,† "the arrondissement of Domfront, which is that of the department of Orne in which the abuse of alcohol is the most habitual, is also that in which the height is the most reduced, to such an extent that in some cantons the recruitment of young conscripts is becoming almost impossible." Alcoholism is also, according to Lancereaux,‡ the cause of half the deaths from consumption in the country. But perhaps the saddest comment of all is the departmental asylum in Orne, in which out of 573 inmates 60

* Baudrillard. "Histoire d'une Bouteille."

† MM. Legrain et Pérès, l'Enseignement anti-alcoolique à l'Ecole.

‡ Alcoholism is the chief source from which asylums are supplied; from 60 per cent. to 80 per cent. of epileptics are due to alcoholism. (M. Duclaux, Directeur de l'Institut Pasteur.)

per cent. of the males and 70 per cent. of the women are "alcoholics."*

There is no doubt that the older peasants are a far more temperate set than the young or middle aged of to-day. Among the seniors of the past generation it is still not uncommon to find a peasant who drinks only water, while those of the seniors who smoke are the exception rather than the rule. Still, one cannot lay down a hard and fast rule about the younger generation. There were at least three or four different races in the five departments under observation, and each, when looked at more closely, showed considerable difference from the others. Calvados is, of course, Norman, so is Orne for the most part. The people, especially in Orne, are rather less enterprising, and the teachers in the schools complain that the children, though far from stupid, are quite content to remain receptive and originate nothing. I heard the same judgment passed on the inhabitants in the neighbourhood of Vimoutiers. They were fond of good cheer, thought much of this world's goods, but were wanting in initiative. I fancy the richness of the country and the *bien-être* may exercise on many a somewhat deadening effect. Certainly, according to more than one witness the *pâturage* tends to encourage laziness. It is only he who tills the soil who earns his bread with the sweat of his brow. In Sarthe one comes across quite another race, who belong to the ancient county of Maine. Here, again, officials who had been in the East and South of France, where the means of existence are not so easy to obtain and the people more active, complained of a certain *mollesse* about the children. A very notable point about Sarthe is its extraordinary thrift, to which allusion has already been made. The following figures of the principal banking centres seem worthy of citation. Le Mans (forty-three branches), 34,900,000 francs deposits; Mamers (eighteen branches), 23,900,000 francs; La Flèche (twelve branches), 11,700,000 francs; St. Calais (six branches), 6,600,000 francs; Château du Loir, 2,800,000 francs; Sablé-sur-Sarthe, 1,900,000 francs; Le Grand Lucé, 1,000,000 francs. In some districts there is a depositor to every two and a-half inhabitants. This extreme economy has sometimes its inconvenient side, as the peasants are more inclined to put their money into the bank than into the land in the shape of artificial manures. Another minor fault with them is their mania for attending markets, of which there are far too many. He would

* Since the above was written a great step has been made to tackle the problem, by the raising of the octroi in Paris on alcohol and distilled drinks to a much higher figure, and the admission, at a nominal rate, into the capital of the so-called fermented drinks, such as wine, cider, and beer. This happy change is likely to be aided by the magnificent wine and cider crop, the former of which has turned out the best for many years. Teetotalism is not likely to gain any serious foothold in France, where probably half the agricultural population are interested in producing wine or cider. "Nous demandons la tempérance et non l'abstinence, nous voulons la sobriété et non le renoncement."—M. P. Beurdeley, article on "l'enseignement anti-alcoolique," *Revue Pédagogique*, September, 1901.

be a public benefactor who suppressed half the markets at present existing. In Indre-et-Loire one comes across again quite a different race. The countries where wine is the staple drink seem to possess inhabitants of a more lively and sanguine temperament than those who drink cider or beer. In build and stature the Tourangeau appears very different from the inhabitants of the other two departments—bluff, witty, *narquois*, *un peu fondeur*, not to mention other qualities he is in many ways much the same as Rabelais painted him, at the Renaissance. He has, also, some of the solidity of Balzac about him, and in comparison with the phlegmatic Norman is rather a *passionné*. Such are a few stray notes on the inhabitants of the country I gleaned from those most competent to speak on the matter. The peasant may somewhat lack energy. It is a fault one can always reproach the country with, but for me who conversed with no inconsiderable number of them, it was a perpetual pleasure to admire their simple yet striking common sense. Always a trifle *méfiant* at the beginning of the conversation, they purposely hold their hand and pretend to know nothing till they see you are not intent on making fun of them, and then they surprise you with their shrewdness. They seem the least likely persons in France to be taken in.

(3.) THE PROBLEM AND THE SCHOOL.

Final statement of the problem.

The above very imperfect sketch of the difficulties of the country and the peasants who inhabit it will not have been attempted in vain if it is regarded as a sort of background to the school itself to set off the latter in its proper relief, and so allow us to deduce what are, and should be, the precise relations between the country and the school, and what is the school's true place in the rural economy. For it should be evident, now that the country problems have been stated, albeit in a bald and superficial fashion, that many of these economic and social difficulties are quite beyond the competence of the school alone to solve, and all that the school can do is to aid in the solution of some of them.

What the school can do. Its local duties.

Taking them in the order in which we have treated the problem, if the local small industries are to be helped, something must be done in the shape of practical work either in the schools or in the evening continuation schools. In agricultural neighbourhoods, where the majority of peasants are also proprietors, instruction in scientific notions applied to agriculture is clearly the solution of the problem, dealing largely with the popularisation of artificial manures, and the teaching of such practical work as grafting. The rôle of the normal schools *vis-à-vis* the country will be to turn out *élèves-maîtres* capable of serving as valuable lieutenants to the departmental or special professors of agriculture. The spirit of saving so widespread among the people should be transferred from an individualistic to a social basis by substituting everywhere the mutual insurance societies among the scholars, and these societies, together with the associations of former pupils, should further develop the spirit of co-operation, which, as we have seen, must be extended from co-operation in

purchase to co-operation in the sale of produce. To combat the emigration to the towns the teacher can cultivate that love of the countryside and of the native village which is nowhere stronger than in France. The recreative evening lectures will do something to redeem the long winter evenings in the country from the charge of dulness. If one cannot have a circus in every village, one can have at least a magic lantern, while to combat alcoholism, apart from the teaching in school and the conferences, there is the work of forming temperance societies among the children, which has indeed been begun in France, though it has not attained the magnitude of the movement in England. Such is what one can rightly demand from the school in its duty towards its neighbours.

But this description of the school work will have been thrown away Its other duties. if it has not been seen that the school is something more than a mere microcosm of the locality. Apart from its local obligations stand its higher duties towards the nation and toward humanity. It strives, as much as it can, within the brief season of the school life, to give the child in a shortened and intelligible manner the experience of the race because he will one day be a man, and the experience of the nation because he will one day be a citizen (See Appendix V.). These, we must never forget, are, after all, the main objects of the school, and because time presses and we wish to give the child not merely hearsay knowledge, or charge his memory with a mass of loose and uncorrelated facts, next to forming his character and awakening his intelligence we aim, above all, at equipping him with the tools of learning—reading and writing and cyphering—that afterwards, as Dr. Harris well points out in his monograph on Primary Education in the United States, he may labour for himself in the field of knowledge, and even if he neglects to continue his education in a formal way in the evening schools, he may at least keep it up and add to it by reading the papers and possibly an occasional book, for the newspaper has become nothing more or less than the popular encyclopædia of the day on topics that all the world wants to talk about. So singing is a good thing, manual work is highly desirable, agricultural education is well-nigh indispensable, but we must not neglect the general education of the child, even in the rural school, by handing him over to the tender mercy of the specialist,* which is often only the word “faddist” writ large.

This general education the French primary schools seem so far to General conclusions. have provided and safeguarded with no small meed of success. Where Guizot planted, Duruy watered, while its present flourishing condition is largely due to Jules Ferry and his able henchman, M. Ferdinand Buisson. One may perhaps regret that the Third Republic

* “The specialist is necessary—necessary up to a certain point—in education, as in everything else. But in nothing is it so dangerous as it is in education to be guided by the judgment of the specialist alone. The judgment of the specialist needs to be criticised, corrected, and supplemented by the experience of all who have direct knowledge of the problems of life for which education professes to prepare us; and the methods of the specialist need to be frankly discussed by those who have watched

has believed it necessary to break so thoroughly with the system as it received it. One may still more deeply regret that the historical development of France has resulted in so sharp a division between rival groups of principles. Certainly it seems unfortunate that the republic has found itself unable to combine the old with the new, for such a sweeping measure as the laicisation of the schools must have meant the deprivation to the State of a vast amount of trained knowledge and solid worth, which are not always the easiest things to replace. Yet, if success is any criterion, one cannot well withhold one's admiration for these root and branch reformers who, in less than twenty years, have remodelled the curricula from top to bottom, profoundly modified the ancient methods of teaching, bodily raised, lifted, and shifted the whole structure of popular education on to an entirely new set of foundations, covered the country with a complete network of free schools, and reconstituted the *cadres* of their educational army with a set of teachers possessed with traditions of devotion and *esprit de corps* that many an older institution might envy. For the teaching has been refounded on the better side of the principles of the French Revolution, and embodies some of its noblest aspirations. The open door has been made a reality in education for the masses, without money and without price, and only improved measures are necessary to compel them all to come in, and a race of teachers has been raised up, not hirelings eager only for their daily bread, but true "shepherds of the people," who labour not alone for the welfare of the school but of the district it serves. It is the very strength and solidity of the system as a whole that permits one to speak so unreservedly of any small defect in its component parts. There is always an abundance of make-weight in the shape of its merits to counterbalance any criticism one may feel it incumbent to indulge in. Nor is it indeed certain that the criticisms which a passing stranger may make have always so wide an application as he imagines. At any rate, his strictures, apart from the reference they may have to his own country, if they have any utility, are meant to be those of a friendly observer, whose admiration of the system as a whole makes him ambitious to be if possible a co-operator, after a humble fashion, in a work which should be not only the pride of France, but of humanity.

CHAPTER XII.

THE PROBLEM OF RURAL EDUCATION IN ENGLAND.

The school problem only part of the rural problem.

The analysis of the rural problem in France should go far to show that the rural school in England cannot be expected any more than the French rural school to provide a panacea for all the ills of the country-side. And so, though it does not directly

the practical results of those methods as illustrated by the skill, the character, and the good sense of the people in whose training those methods have been applied."—M. Sadler in "How far can we Learn Anything of Practical Value from the Study of Foreign Systems of Education?"

concern our educational authorities to diagnose, much less to prescribe, for the present unsatisfactory condition of things in many of the rural parts of England, it seems none the less clear that it is highly advisable to try and obtain a general view of the present position of affairs before venturing to state where and how the school can lend a helping hand in the matter.

Attention has already been drawn to the fact that the rural problem in England is radically different from what it is in France. The rural problem. Owing to the preponderance of large farms in England the vast majority of the children who attend the village schools are the children of the labourers, whose future career, as a rule, is quite distinct from that of the sons of the French peasants. Economically the problem seems likewise different in the two countries. In France the major part of the soil is farmed directly by its owners, except in the districts where the *métayer* system of cultivation prevails. In England a large proportion of the land has, apart from the tithe, to support three categories of persons—the landlord, the tenant, and the labourer, and that with no margin against bad years such as Protection in a measure affords. If the present crisis in agriculture continues, it may end, as some people think, in the squeezing out of the landlords, as the least essential economically of the three. Such an eventuality would be scarcely a gain if the only tie between the remaining parties were that of a cash nexus. Of course, there is the alternative of the landlord turning round and farming his own land, and this does not seem to be altogether improbable, except in the case of very large estates. Under present conditions large farms, unfortunately, seem more likely to pay than small holdings, except where the latter are exceptionally situated. The improvements in French farming, as far as education is concerned, must largely come, for the present at least, through the primary or higher primary school. In England the sons of the farming class go to secondary schools. The rural problem is, therefore, quite as much a secondary as a primary education problem.* We must not only educate Hodge but his master. The landlord.

It seems generally agreed that the chief defect of the modern English farmer is that he has yet to realise the value of co-operative association, not only for the purchase of cake and "artificial" (a matter in which he might take a leaf out of the French cultivator's book), but also for the marketing of his produce, and for obtaining in relation to this more favourable rates from the railway companies. The farmer.

Owing to the agricultural labour market having been in many districts for years overstocked, the farmer was formerly placed, as regards the labour market, in a singularly independent position. The labour question.

* One who is living and working in the midst of the problem writes: "The farmer wants to be humanized as the squire. He wants to add to his soil apprenticeship enough book-learning to keep accounts, to supervise machinery, to check imposition in manure and seed, to work, if a small man, co-operation, to put out piece-work, to inspire confidence in his men."

position. Until a few years back it was more or less a favour on his part to take on a man. Now, unluckily for him, the whirligig of time has brought its revenge, and labour is often woefully scarce. It is difficult for the farmer to change at once his somewhat imperious manners in dealing with the men. It is only natural for the labourer, on finding the tide setting in in his favour, to prove somewhat restless, not to say restive. But the fact remains that some farmers must learn that the men of to-day must be led rather than driven. Rightly or wrongly, the feeling that some of them have engendered in their subordinates is not far removed from downright hatred.

As for the men, the best of them have too often migrated to the towns. Higher wages and greater freedom have been the main incentives. Those who are left are frequently the least enterprising, the least strong, and the least desirable; skilled labour is getting scarcer and scarcer, as the old generation die out. What is wanted in the present race is more skill of hand and eye, a greater keenness to get on, and less of the spirit of shirk.

The rôle of
the school.

How can the school help? By making the education given in its class-rooms a better preparation for the life the majority of rural children have before them; not by cutting down its so-called literary and intellectual side, but by bringing it more into sympathy and accord with rural life. The recent circular on the drawing-up of time-tables gives all the local option that is desirable in the matter. In this way the curriculum can be given, as in France, an agricultural tinge without injuring its main features. The pictures on the walls, the books the pupils use, the subject matter of the teacher's lessons, can be chiefly concerned with the country and with agriculture. In connection with this a great point should be made of Nature study, and the "school journey" should figure prominently on the programme.

Manual training for boys, with cooking and laundry work for girls, should be promoted everywhere. School gardens, more of the Boscombe* than the French type, should be started, and this side of the school work might be encouraged by prizes given by the agricultural societies. Love of the country should be inculcated, the noble side of honest toil, and the advantages of self-help should be the dominant notes of the instruction given. Evening continuation schools should be more widely established, and rendered as practical as possible.

Further
desirable
changes:
a) Educa-
tional.

But this involves further desirable changes. Practical agriculture should be taught in the training colleges, or at least an abundant supply of holiday courses on the subject arranged,

* See Vol. II. of Special Reports (Cd. 8943), "The School Gardens at Boscombe British School," by T. G. Rooper, H.M.I.; and for fuller details on curricula for country schools see Leaflet No. 7 of the Agricultural Education Committee, by Rus; Leaflet 15, by Mr. J. C. Medd; Leaflet 20, by Mr. H. Lee Warner; Leaflet 18, by T. G. R.; Leaflet 19 (on evening schools), by Mr. H. Macan. There is also an instructive paper on the teaching of gardening by peripatetic professors by the same writer in the "Journal of the Society of Arts," March 16th, 1900.

such as the Cambridge County Council and other county councils have established, with a diploma for successful candidates.* The position of the country teachers should be improved, especially in regard to fixity of tenure, and it might be advisable to earmark grants for salaries. Perhaps, in place of the millions that the State has voted to the relief of local taxation it would have been better for it to have assumed the chief cost of education, or at least have definitely devoted the money granted in relief of the rates to education. Again, if practicable, it would be a good thing to differentiate town and country schools. Why should the teachers complain? In secondary education a man has generally to definitely decide whether he will teach classics, mathematics, science, or modern languages, and direct his studies accordingly. The secondary schools are without doubt the better for this differentiation. If salaries in country schools were higher, there would be no economic cause for complaint.

Seeing that often four-fifths and even more of the maintenance in some of the rural denominational schools comes out of the public purse, in the shape of a Government grant, it seems rather false economy to refuse to make up out of the public funds whatever may be the narrow margin between the present grant and the requirements of efficiency on the ground of principle, and thereby hinder the children in the voluntary schools from attaining their full development. This extra grant would be one of the best investments for the State to make, especially if it carried with it the right of the locality to be represented on the board of management of these schools. Provided that the religious instruction is duly safeguarded, the clergy have already given many indications that they will not object to but rather welcome local control. Of course, the great obstacles to instituting one single comprehensive local authority in the country are the small isolated, independent areas of the school boards, which have prevented them from doing the good work that the large boards in the towns have done.† Were the county area, with the county council as the paramount educational authority, made to absorb these isolated areas, we should obtain the same homogeneity of not only primary but primary and secondary education as in France, without however separating the two grades so completely as in that country. This would enormously help to "focus" the educational wants of each locality, and make the locality itself more ready to supply them.

It has throughout, of course, been assumed that the rural school, as the outcome of rural life, should do its utmost to prepare for and promote the future welfare of the children. It is only necessary to mention, in order to dismiss, as wicked and impossible, the theory that the school, in the selfish interests of the few, should be so transformed and deformed as to turn out in this the twen-

(b) Administrative.

The dependence of the school on the locality.

* See also Mr. C. S. Roundell's speech in "Nature Study in Elementary Schools" (*The Rugby Advertiser* Office, 1901).

† See Sir John Gorst's speech at the Fishmongers' Hall, January, 1901.

tieth century a race of serfs and helots of the *ascripti glebæ* type, whose function is to provide a more abundant supply of cheap labour. But all these suggestions for improving the rural school depend for their ultimate success and justification on the conditions of life which await its *alumni*. The school, however perfect, can only give at the most the aptitudes and aspirations for a country life. If the pupils on leaving the school do not find a fair field at home for these aptitudes and aspirations the best of them will leave the villages, just as the best of the present generation have done, and the agricultural bias given to the school will be simply thrown away. One may therefore, perhaps, be once more permitted to go outside the school, though not beyond its lawful sphere of influence, to ask what are the present conditions and prospects of the country-bred lad, and how they may be bettered.

The status
of the farm
labourer.

At the present time, and it is no good blinking at what is a patent fact, the agricultural labourer's status has somehow or another become to be regarded as one of the most menial in the social scale. This is not the place to inquire whether, as some people assert, the board school has helped to spread the cult of the black coat and top hat of the small clerk or draper's assistant, in holding them up before the pupils' eyes as the emblems and insignia of gentility, to the detriment and depreciation of other equally worthy callings. It is much to be suspected that the social atmosphere in which we live has been in these matters by far the potent factor. But when a father with a family of eight children, living in the slums of London, and earning wages below those of many a "teamerman," who is far better housed and fed, refuses to let his two eldest sons come into the country to have a year's trial at agricultural work,* on the ground that such work is "only fit for children out of reformatories," it is evident we have got something deeper than a mere school problem to solve, although, if our country teachers' position were improved, we might have the teachers as strongly in favour of the countryside as in France.

Need of local
co-operation
with the
school.

Assuming that this is a fair sample of the present state of affairs, it seems clear that, if the seed sown in the school is to bear fruit, something must be done by everyone concerned in the welfare of the country to help the labourer to better himself and his position in every possible way. The truth is that village life wants quickening and reorganising. The old feudal ties are passing away, but, fortunately, there are other possible bases for loyalty and mutual good feeling. First, there is the *rôle* of the landlord. He

The landlord.

can do much to render country life attractive by keeping his

* It is worth considering whether it would not be possible for enterprising farmers to take one or two lads of fourteen and fifteen out of the town on a year's trial. There is much to be done on a farm which is really a boy's work, and even if the lad wished to return at the end of the year the benefit to his physique and so to his wage-earning capacity would be very great. I have to thank my brother, Mr. J. Neville Brereton, for this and other suggestions and criticisms on the agricultural side of my report.

cottage property, as indeed many do, in at least thoroughly habitable repair. The value of cottage property is not to be estimated by the rent it pays, but by the accommodation it gives. Good cottages are as necessary to a well-managed estate as good bullock boxes. If the landlord wishes to bind the labourer anew to the soil, he must give him at least a stake in it. He must afford him a chance, if possible, of getting on and making money. In fact, what is wanted is the mending of several rungs in the agricultural ladder, so that a man may be able to rise from the plough. Far from refusing to cut up a field or two in allotments, a wise landlord will go out of his way to encourage the people in the place to take them up.

Is it not desirable that many of the farmers should study to improve their relations with the men, and endeavour to pay higher wages in order to retain the labour? The difficulties are great, but one is impelled to think not insuperable. Perhaps, by encouraging his men to do as much piecework as possible, he may assist them to become as efficient as their forefathers were. His wage bill will be higher, but he will probably find the sweat of the labourer's brow the best manure his farm can have. On the other hand, he may help to promote cordial relations by reviving the old farm festivities of harvest and Christmas frolics, and presenting prizes for the best ploughing and hoeing done on his place.

Again, in spite of difficulties, social and financial, might not many of the village clergy do somewhat more to imitate the methods and resourceful activity of their brother clergy in the great towns? The clergy, as someone has justly said, and this naturally includes the Nonconformists, form the greatest agency for social work in England. Let each village clergyman then help to establish a reading-room, in which lectures can be given, as in France, or utilise the school building for the same purpose. Even if he does not take part in games he can lend an interested support to the village sports. A field can nearly always be found for cricket. A pretty custom, which we have well-nigh lost in England, but which still obtains in France, is that of each village having its fête day. This might well be revived.

The village schoolmaster would no doubt admirably second the social efforts of the clergyman. It is not to be gainsayed that his burden of so-called extraneous tasks* is sometimes unfair

* The two sides of the question are very well summarised in the following extracts:—

"One of the most unfair features in the occupancy of the post of teacher in the village school is the fact that it is frequently made a condition of appointment to and tenancy in the mastership of the school that certain extraneous tasks shall be performed. These tasks are mainly those connected with the church choir and the Sunday-school. And not only is the present position often unjust to the occupant of the mastership of the school, but it is most fruitful in provoking troubles in connection with the tenure of his office. Now, we do not say that the village schoolmaster should not play the village organ or train the village choir. But we *do* say that he should be permitted to please himself about the matter.

and excessive, but when one sees the fervour with which the French teacher accepts these outside duties, one simply refuses to believe that the English teacher is likely to prove for one moment any whit less patriotic and public minded, if the call is made to him in a proper fashion.

her
encies.

Then again, something may be done by reviving and promoting village industries, which, if they are skilled trades, can not only exist but flourish in spite of the stress of outside competition, and it is difficult to see why the co-operative system of trading should not be possible in some cases among the villagers, why it should not lead them to found their own shops, as the operatives have done in the factory districts. In connection with this it would be useful to start village banks, whenever it is practicable. When all is said and done, the country problem, in so far as it concerns the status and economic position of the working-classes, is not so acute as the problem in the town. There is no doubt a good deal of stagnation, but this is a pool which it should not be beyond the power of the angel of mutual goodwill to stir up and endue with healing virtues. There is at least no submerged tenth, which seems in the towns to baffle all the efforts of private initiative to deal with and elevate it.

oneclusion.

These few paragraphs are not meant to be in any way exhaustive. They are only the rough headings of chapters which might easily be expanded to double and treble the size of the report itself. Yet in giving setting and proportion to the question of rural education it is to be hoped they will not be found out of place. The rural problem, in fact, has a threefold aspect—economic, social, and educational—and, peradventure, though highly important, the educational factor is the least important of the three.

CLOUDESLEY BRERETON.

December, 1900 ; revised December, 1901.

Further, we think it highly improper to make ability and willingness to perform these duties one of the conditions of appointment to the head teachership of a public elementary village school."—"The Neglect of Village Education," by T. J. Macnamara, LL.D., M.P.

"The rural elementary school teacher seems to me at this moment the spoilt child of education. His interests are watchfully guarded in Parliament and outside by the National Union of Teachers, and its organs in the Press. He is harassed by fewer examinations, his holidays are more numerous, and his working hours, so far as his prescribed hours are concerned, are more restricted than in any other department of the profession of teaching. It is not surprising, therefore, to find him in request for other useful occupations, with advantage to himself as well as to others, in country parishes. But even here there are ill-advisers, who would fain debar him, under the plea of resisting so-called 'extraneous' duties, from enlarging his sphere of usefulness. When one compares his work, and emoluments, and mental outfit with those of the governess, the master, or mistress of any boarding school, or the country curate, on which side, from a purely mercenary point of view, does the balance lie of adequate remuneration, of leisure, and of independence?"—Rev. J. Lee Warner, formerly fellow and tutor of University College, Oxford, in the "School Guardian," March 11th, 1899.

APPENDIX I.

SHORTAGE OF MALE RECRUITS FOR THE TEACHING PROFESSION.

The question of the falling-off in the number of male recruits for the teaching profession is discussed in a masterly way by M. Forfer, the Academy Inspector at Laon, in an article quoted *in extenso* in the *Revue Pédagogique* of October 15th, 1901. The chief points in the article may be summarised as follows :—

More male teachers are wanted. Why not then increase the number of places in the normal school for intending teachers? Because there are barely enough candidates for the present places. What are the reasons for this falling-off of candidates for a profession which down to 1887 was so popular? (1) The imposition of a year's military service in 1889. (2) The requirement that all intending candidates should have the "*brevet*." (3) The difficulty which country children find in getting the necessary preparation; the country schoolmaster is hard enough worked already. The brightest country children now go to the higher primary school, but the best of them on leaving it take up some more lucrative calling than that of the schoolmaster. (4) As a rule only the weaker pupils in these schools take up teaching. (5) The poor pay that the *stagiaire* starts on; though the capable *stagiaire* gets speedy promotion. Yet the *stagiaires* who deserve such promotion are not very numerous. (6) The teachers, by their complaints, turn many away from the profession. Yet they freely put their own sons into it. Out of 58 pupil-teachers in the Laon Training College, 20 are the sons or brothers of teachers.

The remedy therefore, he argues, is to give the teachers a direct interest in the question of recruiting for the profession, and he proposes that the County Councils should be asked for a grant with which to remunerate schoolmasters who prepare candidates for the examination. Another proposal is to found a sort of preparatory normal school alongside of the Training College—a kind of educational seminary or nursery for future teachers.

APPENDIX II.

THE PERSONAL INFLUENCE OF THE TEACHER IN SECURING A GOOD ATTENDANCE.

The part which may be played by the teacher in improving the attendance at school is touched upon by the Minister in a circular to the Prefects (Nov., 1901). After calling on the latter to report on cases in which the present law is not enforced, and stating that the "Government considers it a duty to put an end to a state of things which is likely to compromise the results of the educational work of the Republic," the Minister proceeds to enlarge upon the immense importance of the personal influence and action of the teachers in the matter. He adds that "in his proposals for promotion or reward in favour of male and female teachers the Academy Inspector should especially take into account the efforts they have made in this direction."

APPENDIX III.

MINISTERIAL CIRCULAR ON THE SIMPLIFICATION OF FRENCH SYNTAX.

On the actual situation of the question a friend writing on the 7th of October, 1901, says:—"The spelling reform is still pending between the Academy and the Ministry. My opinion is that the regulations will be of no avail against current usage. In the schools of the city of Paris, with a few exceptions, one does not believe one is bound by the circular of March. The spirit of the reform is adopted *everywhere*. The famous curiosities in spelling ('chinoiseries orthographiques') have had their day. Nevertheless there is no authority as yet for establishing this reform. What is most clear and definite is that at present in the schools of Paris the teacher passes very rapidly over the old rules that are in the way of being abolished. One no longer spends time over them. The question will certainly come up again at the end of the year. Till then one hesitates, and waits for a definite 'yes or no.' But the out-and-out opposition are beaten."

APPENDIX IV.

SELECTION OF SCHOOL BOOKS.

This selection is limited to a list drawn up every year by a committee largely composed of members of the conseil départemental and presided over by the academy inspector, which in itself is a résumé of the different lists of suggested books which have been sent in by the cantonal assemblies of teachers who thus have the first and last word in the matter.

APPENDIX V.

MINISTERIAL CIRCULAR AS TO THE AIM OF REPUBLICAN SCHOOLS.

"The Republican school is not an institution apart, living a life of its own, and confining itself to the conscientious apprenticeship of reading and writing, of spelling and arithmetic. It is the first, I mean at once the most humble and most important, of social institutions; the one which prepares, in order to take our place, the younger generations animated with the patriotic and republican spirit. It is a sort of national workshop, in which is being forged the France of to-morrow, and from which will issue the great mass of citizens, workers, and soldiers, who thirty years hence will hold in their hands the destinies of the country. Thus nothing which goes on in the school is indifferent to the country. And this is what gives you the right as well as the duty to take a direct interest in it." (Circular addressed by M. Poincaré to the cantonal delegates, July 10th, 1895.)

RURAL EDUCATION IN FRANCE.

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RURAL EDUCATION IN FRANCE.

The following Report is based upon an inquiry undertaken at the request of the Board of Education into the condition of primary education in the rural districts of the departments of the Seine Inférieure, Eure, Eure et Loir, Loiret and Cher, with special reference to the character and effects of the agricultural instruction in the village schools, and the training of teachers to qualify them to give such instruction. These subjects have been previously dealt with at length in the Report on "Agricultural Education in France" ¹(¹) prepared by Mr. H. M. Jenkins, F.G.S., for the Royal Commission on Technical Instruction (1884), and in the Report on "French Agricultural Schools" ²(²) by Major Craigie, Assistant Secretary to the Board of Agriculture, in 1888.* The recent Report on "Agricultural Education in France" ³(³) by Mr. H. Austin Lee, C.B., Commercial Attaché to the British Embassy at Paris deals mainly with Secondary and Higher Schools, with only incidental references to the primary schools. When the Reports by Mr. Jenkins and Major Craigie were issued, it was hardly possible to estimate the results of the reforms in rural education inaugurated in 1879, and considerable changes in the laws affecting education have been introduced within the last few years. The process of reconstruction, moreover, which has commenced in our own system of rural education, adds a special interest to the examination of French methods at the present moment. France differs so widely from England in its social, economic, and agricultural conditions, that it by no means follows that a system which may have succeeded in the one country will equally meet the needs of the other. Still the experience gained in France during the past twenty years cannot fail to be of service. The problems to be solved there were very similar to those with which we are confronted to-day. The instruction in the village schools was wholly unsuitable to the requirements of rural life, the attendance was very unsatisfactory, there was

¹ C. 3981-1² C. 5609.³ C. 9045-33

* Reference may be made here to the joint Report on Manual and Practical Instruction in Primary Schools in France, of Mr. A. N. Bonaparte Wyse and Mr. E. J. Hughes-Dowling, to the Commission on Manual and Practical Instruction in Primary Schools under the Board of National Education in Ireland (Appendices to the Reports of the Commissioners, 1898 [C. 8925]); to Mr. T. P. Gill's Report on Agricultural Organisation and State Aid to Agriculture in France, in the Report of the Recess Committee on the Establishment of a Department of Agriculture and Industries for Ireland, with Appendices, 1896 (Dublin, Browne & Nolan; London, T. Fisher Unwin) (out of print); and to the Report to the Foreign Office on Agricultural Education in France, by Mr. H. Austin Lee (Miscellaneous Series, No. 505, Diplomatic and Consular Reports, Foreign Office, June, 1899 [C. 9045-33]).

an almost entire absence of instruction for those who had left school, and the migration to urban districts was everywhere increasing.

The departments named afford a convenient field for inquiry. Their general agricultural character is not dissimilar from that of England, except in the valley of the Loire, where the vine is largely cultivated. At the same time, the different methods of cultivation, the variety of the crops grown, and the various forms of land tenure make it possible to study the effect of the instruction given in the rural schools under very varying conditions. The area to be covered, however, is so vast, comprising some 31,837 square kilomètres, and including some 4,000 schools, that many years' patient study would be necessary before any final opinion could be formed. The particular quality of each school depends, as in England, mainly upon the capacity of the individual teacher, and the enterprise of the local authority. This Report, therefore, does not profess to be more than a summary of personal impressions. Generalisations from limited experience are always apt to be erroneous, and possibly another visitor to the same departments might arrive at very different conclusions.

ORGANIZATION OF PRIMARY INSTRUCTION.

By the law of October 30, 1886, primary schools comprise:—

- (1.) Infant schools and classes.
- (2.) Primary elementary schools.
- (3.) Higher primary schools, or higher standards attached to primary elementary schools, and called "*cours complémentaires*."
- (4.) Technical or professional schools.

Primary instruction of every grade is free, and is compulsory for all children from six to thirteen years of age, unless they have obtained the "*certificat d'études primaires*," for which they are eligible at the age of eleven.

The chief local authority in each department is the Departmental Council, consisting of the Préfet (President), the Inspecteur d'Académie (Vice-President), four members of the Conseil Général (or County Council) elected by their colleagues, the director of the male and directress of the female Training Colleges, two male and two female teachers elected respectively by their fellow-teachers, and two Inspectors of Primary Education nominated by the Minister of Public Instruction. The presence of elementary teachers upon the Departmental Council is noteworthy. The members receive no pay for their services, but an allowance for travelling expenses is made to those Inspectors of Primary Education and Teachers who do not reside at the capital of a department. The Council, subject to the approval of the Minister of Public Instruction, determines the number, character and position of public primary schools of every grade, as well as the number of teachers to be engaged in them. Its

other duties are to see to the application of the programmes, methods, and rules promulgated by the Central Council at Paris, to organise the medical inspection of the schools, to issue rules as to their internal management, to determine what schools require an assistant teacher, and to suspend or dismiss teachers, who have the right, however, of appearing before the Council and of appealing to the Minister. Members of the Departmental Council hold office for three years. Other people interested in education are co-opted as advisory members of the Council, but have no voting power. In each Canton one or more delegates are appointed by the Council to visit and supervise the public and private schools of the Canton, and each delegate has particular schools definitely placed under his care. Each delegate holds office for three years and is expected to furnish the Departmental Council with full reports on the condition and needs of primary education within his district.

Every Commune should be provided with at least one public primary school, but the Departmental Council may, subject to the approval of the Minister of Public Instruction, allow two or more Communes to be united for the establishment and maintenance of one school. When a single Commune, or the Communes which have been united, have 500 or more inhabitants, there ought to be at least one public primary school for girls. This rule, however, is only gradually being enforced. In the Seine Inférieure, for instance, there are 10 Communes with a population exceeding 500, where there is no public primary school for girls, in Eure et Loir 15, in Loiret 8, and in Cher 13.

The expenses of primary education are distributed in the following manner:—

The State pays the salaries of the teachers and inspectors, and the cost of maintaining students at the Training Colleges.

The Departments pay the rent and cost of repairing their Training Colleges, the expenses connected with the Academy Inspector's offices, and an allowance of not less than 300 francs per annum to each of the Primary Inspectors, independently of their regular salary.

The Communes pay the rent, if any, of the school buildings, the cost of repairing them, a lodging allowance to teachers, where there is no school-house, the expense of lighting and heating the schools, of supplying and renewing school furniture, registers, and books, and the wages of caretakers, &c.

In every Commune there is a School Committee (*Commission Scolaire*), composed of the Mayor, or his nominee, as President; of one or more Cantonal delegates, according to the number of Cantons included in the Commune, nominated by the Inspector of the Academy; and of members elected by the Municipal Councils in the proportion of one-third of their total number. The Inspector of Primary Instruction for the district is an ex-officio member. The Committee should meet at least once every three months, and any member who fails to attend three consecutive meetings without reasonable excuse loses his seat. The duties of the Committee are to draw up

annually before the commencement of the school year a list of all children from 6 to 13 years of age, to enforce the attendance laws and inflict penalties for disobedience to them, and to establish a School Fund (*caisse d'école*). This fund is intended to assist poor children to attend school, by providing them with warm food in winter, clothes and boots, and for the purchase of school material. The members of the Committee have no right of entry into the schools, they may not interfere with the character or methods of instruction, nor have they any control over the schools or the teachers.

¹ C. 8925, App. B. III. [Appendices of the Reports of the Commission on Manual and Practical Instruction in Primary Schools under the Board of National Education in Ireland, 1898.]

Without a knowledge of these particulars, some of which may be read in greater detail in the "Joint Report on Manual and Practical Instruction in Primary Schools in France,"¹ by Mr. A. N. Bonaparte Wyse, M.A., and Mr. E. J. Hughes Dowling, M.A., it is impossible to understand how largely the condition of rural education depends upon the activity of the municipal authorities, or to see how far the elaborate machinery devised in Paris attains its object.

Écoles Maternelles.

These infant schools, which receive children from the age of two to six, are found mostly in towns, where they afford a convenient asylum to which mothers who are at work may send their children. The school hours are from 7 a.m. to 7 p.m. from March 1 to November 1, and for the rest of the year from 8 a.m. to 6 p.m. Children may remain at them all day, and most of them are provided with a kitchen (*cantine*), where the mid-day meal can be cooked. A large proportion of them are maintained by various Religious Orders, and where this is the case, the appointments are invariably excellent. Unfortunately, when they are the property of the municipal authorities, they are often in a state of considerable neglect. Writing upon this point in his last Report, M. Pouillot, Inspecteur d'Académie for Cher, remarks:—"The condition of the teaching material in the majority of infant schools in this Department is poor, and it will only be possible to improve it gradually, relying chiefly on the goodwill, initiative, and ability of the teachers; for the municipal councils, instead of regarding their schools as establishments of primary education, where infants of both sexes may receive in common the care which their physical, intellectual, and moral development calls for, are too much inclined to look upon them simply as nurseries." The two schools of this description which I visited left nothing to be desired. One was at the village of Chaumont on the Loire, kept by the Ursuline Sisters, and the other (for boys only) was attached to the National Professional School for Practical Engineering at Vierzon (Cher). In both instances the rooms were large, bright and airy, the children clean and healthy, and the arrangements for feeding them admirable. Each child had a diminutive table, chair, tablecloth, and serviette. Some children bring their own food and have it warmed at the school, others pay about 1½d. for their meal, while

food is given to the poor ones. At Brou and Nogent-le-Rotrou (Eure et Loir) the kitchens at the écoles maternelles are said to have been of the greatest assistance to poor families during the winter.

Écoles Primaires.

All primary schools have three divisions :—

1. Cours élémentaire (7–9 years of age).
2. Cours moyen (9–11 years of age).
3. Cours supérieur (11–13 years of age).

The upper division is rarely to be met with in village schools; the examination for the *certificat d'études primaires* is upon the work of the middle division, and, as M. Ferrand, Inspecteur d'Académie for Loiret, said to me, "the rural school does not look beyond that." If any rural children remain at school after obtaining the certificate, for the most part they repeat their previous lessons in a rather more advanced stage. The three divisions may be split up into classes, according to the number of pupils, but in M. Ferrand's opinion the less this is done in rural schools the better. Very many of them have only a single teacher, and the multiplication of classes entails the employment of the older boys as monitors, which invariably causes the school to suffer. It is, however, a difficult matter for the teacher to arrange his work satisfactorily, especially when the children are in the habit of returning to school at different times of the year. Schools are open for five days in the week, the usual holiday being Thursday, and the hours are from 8 a.m. to 11 a.m., and from 1 p.m. to 4 p.m. It rests with the Prefect and Departmental Council to fix the date of the long vacation, which lasts for six weeks, and they are recommended by a Circular of June 13, 1894, to fix it when agricultural or industrial operations are most likely to keep the children away from school. Practically the curriculum is the same for all schools (boys and girls), subject to slight modification by the Departmental Council, and it comprises: moral and civic instruction, reading and writing, the French language, arithmetic and the metric system, history and geography especially of France, object lessons, elementary science and its application to agriculture, drawing, singing, manual occupations, military drill for boys, and needlework for girls. There are no optional subjects, the whole scheme is obligatory, and the natural result of so elaborate a programme is that much is necessarily omitted in the rural schools or very imperfectly taught.

Subjoined is the Time-table (*emploi du temps*) for schools of one class with a head and an assistant teacher, adopted by the Departmental Council of Eure et Loir, and courteously supplied to me by M. Dauzat, Inspecteur d'Académie.

EMPLOI DU TEMPS POUR LES ÉCOLES A UNE SEULE CLASSE.

MATIN.

COURS.	De 7 h. 50 à 8 h.		De 8 h. 30 à 9 h. 20.		De 9 h. 35 à 10 h. 20.		De 10 h. 20 à 11 h.	
	De 7 h. 50 à 8 h.		De 8 h. 30 à 9 h. 20.		De 9 h. 35 à 10 h. 20.		De 10 h. 20 à 11 h.	
	Morale (3 Leçons). Instruction civique (2 Leçons).		Arithmétique (3 Leçons). Système Métrique et Géométrie (2 Leçons).		Lecture (3 Leçons). Récitation (2 Leçons).		Dessin (2 Leçons). Travail manuel (2 Leçons). Chant (1 Leçon).	
Supérieur et Moyen	20' Leçon commune aux 2 cours. M		10' Devoir		20' Leçon commune aux 2 cours. M		10' Devoir	
Elémentaire	Inspection de propreté. — Entrée. — Appel.		20' Leçon. M		20' Leçon. M		10' Devoir	
Préparatoire	Lecture. A		Devoir.		20' Leçon. M		10' Devoir	
	Historiettes morales M		Écriture. A		Récitation.		Exercice de français. M	
	Copie d'un Résumé		Exercices d'application. A		Lecture ou Vocabulaire. A		Exercices simultanés pour les trois cours. M	

SOIR.

COURS.	De 12 h 50 à 1 h.	De 1 h. à 2 h.		De 2 h. à 2 h. 25		De 2 h. 25 à 2 h. 40.	De 2 h. 40 à 3 h. 30.		De 3 h. 30 à 4 h.	
		Langue Française.		Écriture (4 Leçons). Gymnastique (1 Leçon).			Histoire (3 Leçons). Géographie (2 Leçons).		Sciences Physiques et Naturelles (3 Leçons). Agriculture (2 Leçons).	
Supérieur et Moyen	Inspection de propreté. — Entrée. — Appel.	30'	30'	25'		Récréation.	25'	25'	20'	10'
		Dictée ou correction de rédaction. — Leçon de grammaire ou de vocabulaire. M	Devoir.	Exercices simultanés pour les 3 cours. M			Leçon. M	Devoir.	Leçon commune aux 2 cours. M	Résumé
Élémentaire		40'	20'				Étude ou Devoir.	Leçon commune aux 2 cours. M		Copie d'un Résumé
		Devoir. Exercices. A	Dictée ou correc. de rédact. — Leçon de gram. ou de voc. M							
Préparatoire		30'	10'				Calcul. A	2 cours. M	Lecture préparatoire à la Leçon de choses. A	Leçon de choses. M
		Lecture. A	Leçon de gram. M ou rédact. M							

Explication des abréviations : M maître ; A aide.

Every child on first entering the school should receive what is called a *cahier de devoirs mensuels*. This is a copy-book, in which the child in class, and without assistance, must write the first lesson of every month or fortnight throughout its school life. Its object was thus defined in the Official Circular of January 13, 1895:—"Une chose importe, et c'est la seule: qu'il existe dans tout école et pour tout enfant sans exception un cahier gardé avec soin, qui, d'une manière, ou d'une autre, et par un nombre suffisant de spécimens empruntés aux diverses époques de sa scolarité, puisse fournir au bout de quelques années une preuve irrécusable de la régularité de ses études, la trace de sa propre assiduité ou de ses absences, et, par conséquent, la meilleure des réponses de l'instituteur aux familles qui peuvent demander compte à l'école de ce que leurs enfants y ont fait et en ont emporté." Many teachers are in the habit of appending a note to the exercise with observations on the child's conduct, &c., and sending the book every month to the parents, who sign and return it. When this is done it affords an excellent way of stimulating the interest of the parents in the school, but one teacher honestly informed me that it was not his custom to do so, for he did not know what the parents might take it into their heads to write in the book.

The *cahier de roulement* is a copy-book which passes from hand to hand, and in which a different scholar each day writes the lessons of the day. It enables the Inspectors to tell at a glance whether the programmes are followed, and also indicates to some extent the degree of equality in the attainments of children in the same class.

Mixed schools (*écoles mixtes*) are almost always under a male teacher—out of 345 mixed schools in the Seine Inférieure only four are under a mistress—and the sewing lessons are given by an outside teacher. In these schools the children are separated according to their sexes, but there is no partition between them. Occasionally they have separate playgrounds.

In general the school buildings are good, and the class rooms light and well ventilated. Here and there one comes across buildings that need repair or enlargement, but the subventions from the State have been more liberal of late years, and "*on va bâtir*" is the usual reply to any criticism. In some of the more isolated villages there is considerable room for improvement, and, in the expressive language of one of the inspectors, "*le bien ne va qu'un pas boiteux*." Still it must be admitted that as a whole the school buildings are superior to those in the rural districts of England, and the teachers' houses are distinctly better. In no instance did I hear the slightest complaint from any teacher as to the quality of his house; in fact one teacher enthusiastically declared that they were really "palaces." They certainly are well built, roomy, and attractive in appearance. Attached to almost all of them is a fair-sized garden, which is the exclusive property of the teacher. In the department of Cher, for example, all but 46 of the 589 public schools have gardens. Generally they are well cultivated, and are frequently

used for instruction in practical horticulture, or bee-keeping, or for simple experiments and demonstrations in the science lessons bearing upon agriculture. Internally the condition of the schools is not so favourable. The expense of repairing them and providing school material must be borne by the Municipal Council. Strictly speaking the walls should be whitewashed every year, but it is not uncommon to find that they have been untouched for years. On the whole the school furniture, though simple, is adequate. Throughout the department of Eure-et-Loir it appears to be in a satisfactory condition. Elsewhere the municipalities rely too much upon State aid, which is of rare occurrence, for the repair or improvement of the furniture. The great defect is often the uniformity in the size of the desks for all scholars. The heads of little children just reach the top of the desk, and, as one of the inspectors pathetically remarked, "bien inspirés ceux qui dorment!" Geographical maps and history tables are particularly good, but diagrams for agricultural or horticultural instruction are generally inferior to those which may be procured in England. In fact one of the most successful rural teachers, whom I met, wrote, after my return to England, asking if I could obtain for him some of the English diagrams, of which he had seen specimens and heard so much. The text-books, though well compiled, are rather too voluminous and range over too wide a field. With a curriculum so crowded as that of the French primary schools, it is essential that the teacher devote his attention solely to the most important points. Again and again the Inspectors protest against the endless multiplication of text-books, and the mechanical teaching which follows from using a lesson prepared in Paris for some "abstract boy." "Mais vraiment croit-on de bonne foi que ces devoirs-omnibus destinés à toutes les classes sans discernement . . . puissent se substituer aux maîtres? Font-ils autre chose que les 'tailleurs à confection'? Sous prétexte de faire des habits qui aillent à tout le monde, ils prennent, comme on dit, mesure sur 'une guérite.' Il y a pour l'instituteur un noble emploi à faire de son temps et de son intelligence: il semble que ce soit de penser par lui-même, d'enseigner non pas pour 'l'élève abstrait,' mais pour les élèves qu'il a devant lui, qu'il connaît, et qu'il aime, de dire ce qui convient à eux et non pas à d'autres, de faire enfin ce que font nos bons maîtres qui savent rester 'eux-mêmes'!" In schools with a single teacher there is a tendency sometimes to concentrate all the effort upon the elder pupils to the neglect of the young ones, and occasionally one sees the "cours élémentaire" occupied in making interminable copies of verbs or unintelligible texts, simply with the object of keeping the children quiet.

Of the discipline and behaviour of the pupils in every grade and type of school it would be difficult to speak too highly. Alike in the towns and in the villages, in the playground and in the class room, courtesy is the invariable rule. The children answer brightly and intelligently, they like to show their work, and their interest in the experimental and practical lessons is

very marked. Students in the higher schools and colleges are just as courteous. There is the same disposition everywhere to assist a stranger, to answer all his questions and to tell him what he wants to know. Even in the class-rooms for older girls, as at the école ménagère at Rouen, there is no trace of "mauvaise honte" or giggling, and all the girls, except the one addressed, proceed quietly with their work. Of course the same features might be observed in English schools, but it is to be feared that in many of our village schools the appearance of a foreigner speaking indifferent English, and asking innumerable questions might attract unpleasant attention. My inquiry led me over a wide area, and in no instance did I experience the slightest rudeness or foolish shyness. Boys or girls at play would run off at once to fetch any one whom one wanted, whilst the rest went on with their games. These characteristics of French childhood I attribute largely to the personal influence of the teachers. Their relations with their pupils are invariably of the happiest description, and a spirit of lightheartedness and good fellowship seems to pervade every school. Much has been written of late about the supposed ill-feeling towards this country. I can only say that, whether visiting such an establishment as the National Agricultural College at Grignon or the humblest village school, I did not detect the shadow of a shade of it either amongst teachers or pupils.

SCHOOL ATTENDANCE.

A glance at the official reports discloses a very unsatisfactory state of things at the majority of rural schools. In some parts of the country the communes are so large, and the hamlet schools so few, that attendance in the winter is almost impossible. Bad weather, dirty roads, and colds keep the children at home then. In summer they are wanted to work in the fields, to gather apples or beet, and to look after the cattle. The general desertion begins about the middle of June, and lasts for four months, three-quarters of those upon the register being absent. "The attendance does not seem to get any better," writes M. Ferrand. "It is hopeless to contend against the necessity which compels poor people to utilise their children during the four months in which they can hire them out. One might as well every year omit this paragraph of the report as 'already read.'" He goes on to say that in some communes of Berry a very unexpected reason for non-attendance is given: "The older brothers and sisters are jealous of the young ones, and insist on their parents keeping them from school." M. Marie Cardine, Inspector of the Academy for the Seine Inférieure, asks in despair "whether it is true that people do not value that for which they pay nothing, which is absolutely free, and ought we to acknowledge that the old masters are right, who tell us that if fees to some extent were charged the attendance would be far better?" In his department the Primary Inspector for Dieppe recently inquired into the causes which kept some

830 children in the rural districts near Dieppe out of school, with the following result:—

	Boys.	Girls.
Taking care of younger children - - -	20	68
Work at home or in service - - -	186	108
Want of clothes, dirtiness, scurf - - -	51	30
Wandering about - - - - -	25	6
Habitual and daily begging - - - - -	25	15
Disinclination, neglect - - - - -	116	116
Miscellaneous - - - - -	30	34
	<hr/> 453	<hr/> 377

No attempt is made to enforce the law of March 28, 1882. It remains a dead letter. The school committees, whose duty it is to put the law in motion, shrink from summoning those, upon whose suffrages they depend for their office, to appear before the magistrate. In the opinion of some, no improvement is to be looked for until the constitution of these committees has been altered. It is questionable, however, whether any change in their composition would effect the desired result in view of the widespread sympathy with the struggling poor. In many districts wages are so low that the labourers find it hard to live, and few are willing to deprive them of their children's earnings. As one of the Inspectors has said, "it is all very well to talk of the parents sacrificing the futures of their children to needs that are often trifling. The needs may appear trifling, but they are often inexorable. *Primo vivere, deinde philosophari*: food is the first necessity, without it the very power of receiving instruction is gone." Originally the school fund (*caisse d'école*) was intended to meet the case of the indigent.

The Ministerial Circular of May 12, 1867, expressly states that "it is not enough, in some cases, to open the doors of the school without charge: experience shows that many children, who may be admitted free, do not attend, or, if they attend at all, attend so irregularly that they derive no real benefit. That is due to many causes which the school fund may remove. The need which parents have for the services of their children—cannot the school fund give them some assistance, on condition that they send the children regularly to school? The children have no proper clothes—cannot the school fund distribute some? Can it not give some reward to those who attend most regularly? award prizes beyond those for which the Municipal Council allows a certain sum, or double their value?" Unfortunately the school fund exists only in name in most of the rural districts. It was originated with the idea of stimulating private initiative and of interesting all classes in the welfare of the schools, but the private initiative has been found wanting. In the whole department of Loiret there are only about twelve School Funds doing effective work, and one at least is supposed to exist in each of the 349 communes. On the other hand, in Eure-et-Loir their condition

in more satisfactory, and last winter in a certain number of districts soup and hot food were given to all or some of the children and in some cases clothes were distributed as well. To meet the difficulty of getting the children to school during the harvest season, M. Pouillot, Inspector of the Academy for Cher, has suggested a rearrangement of the time-table. He proposes to shorten the mid-day interval, and that the elder children should attend from 10 a.m. to 3 p.m., thus leaving them at liberty to work before and after school, especially those engaged with the cattle. The younger ones are to be taught before 10 and after 3. This would throw an additional burden upon the teachers, and it is not proposed apparently that they should receive any additional salary.

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Art. 15.

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18, 1887,
7.

The school committees may, subject to the approval of the Departmental Council, permit children, engaged in industry and old enough to be apprenticed, to be absent from school either in the morning or the afternoon; the same permission may also be accorded to children engaged in agriculture, outside their own families.¹ The Departmental Council also may, after consultation with the Municipal Council and upon the proposal of the Inspector of the Academy, establish half-time schools (*écoles de demi-temps*) in any commune or part of a commune.² In such a case the director of the school is to divide the children into two groups, one for the morning from 8 to 11, and the other for the afternoon from 1 to 4. Parents, however, may, if they like, send their children to both classes. So far as I could gather, no advantage appears to have been taken of this provision in the districts which I visited. M. Ferrand informed me that, although the suggestion had been embodied in the Departmental rules for Loiret, and although he had tried to organise half-time schools in La Sologne, nothing had really been done. His general account of what usually happens was as follows:—In agricultural communes, where the population is poor and there is much pasture land (especially in La Sologne and Berry), the children are hired out for four months, either in their own communes or elsewhere. From the age of 10 they are employed to look after the geese or the cattle. In this way a quarter and sometimes a third of the children in the two upper divisions are absent from school from the beginning of May. This desertion causes other children to play truant and finally in some schools half the children cease to attend, unless there is a strong master. The children however that remain are enough to occupy the teacher and so the school is not closed. The teacher consequently does not ask for a half-time school and is satisfied with a diminished audience. Sometimes to oblige the parents he opens the school for new pupils in the summer receiving little children below school age and thus enabling the parents to work all day in the fields. This disorganises the classes but M. Ferrand cannot see at present how it is to be avoided.

Irregularity of attendance to some extent seems to be inevitable in the rural districts. It runs with the teacher himself more than with anyone else to overcome it. "As is the

teacher so is the school" is a maxim of universal application. "Ce n'est pas seulement avec sa tête, c'est avec son cœur que l'on enseigne." A good teacher has a remarkable power of attracting children. This is clearly shown by the wide difference in the average attendance in adjoining communes, where the economic conditions are identical. A striking instance of a teacher's personal influence was brought to my notice. In a certain village boys and girls alike used to desert the school before the summer; more than two-thirds of them were absent from the beginning of May. The teacher was changed. The new master knew how to attract children. In July, after the First Communion (which is the usual signal for leaving school), after the examination for the *certificat d'études primaires*, in the very middle of the harvest, the boys' school is full; the girls' school is as much deserted as formerly. There can be no doubt, too, that where the instruction is of a useful practical character the attendance is always better. At the village of Bois-le-Roy (Eure), for instance, where there is a small school with thirty-five pupils, and where excellent horticultural instruction is given in the school garden, it is rare for any child to be absent except through illness. The same results are to be observed throughout the neighbourhood of Pithiviers (Loiret), where special attention has been paid to agricultural education.

It is not easy to determine the average age of the children in primary schools. The statistics only give the numbers of those under 6, between 6 and 13, and above 13 years of age. The figures present some rather startling features. In Loiret, for example, the number of children under 6 years of age suddenly fell from 8,585 in 1896 to 6,504 in 1897, showing the rapid rate at which the population was diminishing. The Department in fact lost some 6,214 inhabitants within five years. Since 1897 the number of children under six years of age has increased to 7,151. The following table gives the last statistics published for three departments:—

CHER :		1898.		1897.	
Under 6	- - -	6,094	- - -	5,829	+ 265
From 6-13	- - -	42,152	- - -	42,253	- 101
Above 13	- - -	2,517	- - -	2,549	- 32
EURE-ET-LOIR :					
Under 6	- - -	9,495	- - -	9,387	+ 108
From 6-13	- - -	32,637	- - -	32,801	- 164
Above 13	- - -	1,572	- - -	1,496	+ 76
LOIRET :					
Under 6	- - -	7,151	- - -	6,735	+ 416
From 6-13	- - -	44,051	- - -	44,083	- 32
Above 13	- - -	2,054	- - -	2,030	+ 24

But without having any definite statistics upon the point, it may safely be said that the number of children from 11 to 13 in the rural elementary schools is very small, and it is exceptional to find any above 12 years of age. Some people have attributed this to the fact that children are eligible at the age of eleven for the *certificat d'études primaires* and so have become

exempt from attendance. If, however, one asks a child of 12 or so in the fields why he is not at school, he never replies that it is because he has the certificate. He knows perfectly well that if he does not choose to go to school, there is no authority which will compel him to. The general situation has been thus graphically described by one of the Inspectors: "Jetez les yeux sur nos élèves. Ils nous quittent à 12 ans, à 11 ans parfois. Parmi ceux qui vont partir si tôt, beaucoup sont venus deux ans seulement (les deux années du catéchisme) à l'école du bourg qui est trop loin de leurs hameaux. J'ai vu, à Beaulieu, des enfants de 12 ans dans la division enfantine: ils allaient quitter l'école au lendemain de leur première communion et ne savaient pas lire. Qu'ils viennent deux ans, ou 4 ou 6, beaucoup ne fréquentent guère. Il n'est aucun enfant peut-être qui n'ait perdu l'une ou l'autre de ses années d'études pour maladie, rougeole, scarlatine, gros rhume, &c.: ils viennent à cinq ans, quand ils viennent: ils ne travaillent guère avant 6 ou 7, et ils partent à 11! La rentrée dans les campagnes n'est jamais complète avant novembre. En décembre et janvier, la rigueur de la saison multiplie les absences, en mai, on déserte pour aller aux champs. Dans notre Berry on peut admettre qu'une bonne moitié des enfants ne viennent pas à l'école plus de 6 mois, les bonnes années. Sur un cours moyen de 20 élèves, l'instituteur aura peine à en présenter 6 au certificat d'études. Et que savent les autres quand ils nous quittent?" In Cher out of 104,800 electors upon the register, about 28,900, or more than a quarter, are illiterate, and in the communal assemblies there are still 450 municipal councillors who cannot sign their names. There is one council in which nine members have never received any education at all.

CERTIFICAT D'ÉTUDES PRIMAIRES.

The examination, which is held at the end of each school year is conducted by a Cantonal Commission, appointed by the Rectors, on the nomination of the Inspector of the Academy. Of this commission the Primary Inspector for the district is *ex-officio* president. In the examination of girls some ladies must always be upon the commission. The examination is partly written and partly *vidé-voce*: in the latter portion it is public. Candidates must be at least 11 years of age, as previously stated, and the examination is based upon the work of the middle division. To gain a certificate not less than half of the total marks must be obtained, and a cypher in any subject is fatal. The written examination comprises: (a) Dictation; (b) two questions in Arithmetic and the Metric System; (c) a short Composition on either Moral or Civic Instruction, History and Geography, or Elementary Science and its applications; (d) Drawing for boys in urban schools, and one or two questions on Agriculture for those in rural schools. The oral examination comprises: (a) Reading, and Recitation of Poetry; (b) questions on History and Geography. Girls are

also examined in Needlework, and since this subject became obligatory, the sewing lessons have improved considerably. Urban and rural schools are distinguished according to the professions generally followed by a majority of the parents of the children attending the schools.¹ Children, however, in the urban schools may be examined in agriculture, and those in the rural schools in drawing, if their parents desire it, both of these subjects being compulsory in all schools. The proportion of successful candidates ranges from 77 per cent. in Cher to 84 per cent. in Loiret. This in itself is satisfactory. The idea, moreover, of the certificate is excellent, as evidence of the completion of an adequate elementary education, and parents like their children to have it, but the standard of the examination is too low, and it affords a poor test of a child's knowledge. Teachers too are tempted to "cram" their pupils for it, notwithstanding all the remonstrances of the Inspectors. At the same time the character of the examination until 1897, when agriculture was added to the list of obligatory subjects, naturally operated against agricultural instruction in the rural schools.

¹ Ministerie
Circular,
Jan. 12, 189

SCHOOL MUSEUMS, LIBRARIES, SAVINGS BANKS, SOCIETIES, ETC.

In some of the rural schools excellent museums may be found, and this was especially the case at the village of Olivet (Loiret), to which reference will subsequently be made. The following very valuable suggestions as to what should be included in the museum of a rural school are taken from the Report of the Conference on "L'Outillage Scolaire" held at Chartres in 1896. "The school museum will include an agricultural section, containing:—The constituent elements of the soil—sand, chalk, clay and humus. The secondary elements, such as magnesium and oxide of iron. The substances used to improve the soil, *e.g.* chemical manures. Specimens of the principal plants cultivated, or capable of being introduced into the district. Each plant, or portion of a plant, should be accompanied by its seeds, dried fruits or other products. A collection of plants useful and injurious to agriculture. A collection of insects. An album with pictures of agricultural implements, different kinds of trees, the best varieties of fruits, and the chief tribes of domestic animals. An agronomical chart, showing the nature of the different soils in the Commune, their properties, and the results of the analyses of the soils in the neighbourhood." An intelligent teacher would find such a museum of the utmost assistance in the agricultural or horticultural instruction, but too many teachers are apt to regard museums simply as ornaments to the school.

About a third of the rural schools have libraries, which are open to the adults as well as the children. They are popular, and the books are extensively read. A steady increase in the number of libraries is to be noted but progress is slow and will remain so until private initiative helps the schools more and the School Fund becomes more of a reality.

Opinions differ as to the value of School Savings Banks. They flourish in the neighbourhood of Châteaudun (Eure-et-Loir), where great pains have been taken to promote thrift amongst the children. In Cher they have almost disappeared, and M. Pouillot thinks that, since there is now a savings bank in almost every village, teachers need not be troubled with the duty of keeping delicate and intricate accounts.

Many schools have useful little societies for the protection of birds and animals. These serve to familiarise the children with their habits, and to teach kindness to dumb creatures. Small prizes are usually given to the most active members of each society.

Old student's clubs (associations d'anciens élèves) are frequently formed. Interest in the school is thus maintained amongst those who have left it, and the clubs provide many opportunities for pleasant gatherings. In the summer fêtes are organised, where the funds admit of it, and in the winter concerts and reading parties are held. The men have shooting competitions, or topographical walks, &c. The women sometimes arrange a course of domestic economy or cooking. As a rule the clubs are initiated by the teachers, and they seem to be a valuable adjunct to the schools.

SCHOOL STAFF.

All teachers are divided into probationers (*stagiaires*) and certificated teachers (*titulaires*). No one can be admitted as a certificated teacher without having served for at least two years as a probationer in a public or private school, and without having obtained the "*certificat d'aptitude pédagogique*," for which they are not eligible until 21 years of age. The time passed at the training colleges counts, in the case of male students, from their 18th year, and in the case of female students from their 19th, as part of their service as probationers. The Inspector of the Academy appoints the probationers, and the Prefect appoints the certificated teachers, under the authority of the Minister of Public Instruction and upon the nomination of the Inspector of the Academy. Head teachers of a school with more than two classes are entitled Directors.

After appointment teachers are liable to five degrees of punishment for misconduct:—

1. Reprimand, pronounced by the Inspector of the Academy.
2. Censure, also pronounced by the Inspector of the Academy, after consultation with the Departmental Council. This censure may be inserted in the Official Bulletin.
3. Dismissal, pronounced by the Prefect, on the motion of the Inspector of the Academy, after consultation with the Departmental Council. In this case the teacher has the right of appearing before the Council, of procuring copies of the evidence against him, and of appealing within 20 days to the Minister.

4. Suspension for a period not exceeding five years.

5. Total suspension.

In both these cases judgment is pronounced by the Departmental Council, before whom the teacher has to appear. He may employ counsel to defend him, is entitled to inspect the evidence, and may within 20 days lodge an appeal before the Superior Council of Public Instruction.

Teachers, exclusive of probationers, are divided into five classes, and there is a fixed percentage of teachers in each class, to each of which there is a fixed salary.

Class.	Salary of Masters.	Salary of Mistresses.	Percentage in each Class.
Probationers - - -	£36	£36	15
5th Class - - -	£40	£40	25
4th Class - - -	£48	£48	25
3rd Class - - -	£60	£56	20
2nd Class - - -	£72	£60	10
1st Class - - -	£80	£64	5

Teachers in charge of a school with more than two classes have an additional salary of £8, and those in charge of schools with more than four classes of £16. Teachers of complementary classes (*cours complémentaires*) have £8 in addition to the salary of the class to which they belong. Sewing mistresses in mixed schools under a master have a maximum salary of £3 6s. 4d. All teachers have houses rent free, or, if there is no house, an allowance instead, determined by the Prefect. Fixed lodging allowances, ranging from £4 to £32, and in Paris to £80, and proportionate to the population, are also paid to the directors of schools with two or more classes, and to the teachers of complementary classes. All other certificated teachers receive an allowance at half, and probationers at a quarter of the above rates. In each department there is a definite number of teachers belonging to each class, and promotion from one class to another goes by seniority and teaching capacity. On the 14th of July in every year various distinctions are conferred upon masters and mistresses by the Minister of Public Instruction upon the recommendation of the Departmental Council, or in the case of the highest reward upon that of a special committee composed of the Inspector of the Academy, the Primary Inspectors, the Director and Directress of the Training Colleges, and two nominees of the Departmental Council. Certificated teachers of five years' standing are eligible for "honourable mention"; those who have been honourably mentioned within the previous two years may receive a bronze medal, and a silver medal may be given to those who have had a bronze medal within the previous two years. Those who have obtained a silver medal have a good service pension of £4 per annum, and are entitled to wear a violet ribbon with yellow strings on their

left breasts. Teachers of 25 years' standing, and in possession at least of the bronze medal, may become "honorary teachers," which entitles them to attend and take part in the Pedagogic Conferences of the canton in which they reside. This system of promotion and reward unquestionably acts as a stimulus to the teachers; good work is sure of official recognition.

At the age of 55 and after 25 years of active service the teacher may claim a pension. The time spent at the Training College after the age of 20 counts as active service. Inability to continue teaching from ill-health dispenses with the condition as to age. The pension, which cannot be less than £25 per annum for masters, and £20 per annum for mistresses, is half of the highest salary earned during any period of six years, not necessarily the last six years. The retired teacher also receives one-twentieth of any additional salary which he may have had for local and incidental services, but the total pension must not exceed the amount of salary which he would have received directly from the State had he continued in active service. To prevent inconvenience to the teacher from the non-payment of the pension immediately after he has become entitled to and has applied for it, he is to be retained in office at his full salary until the pension is paid.¹ If a teacher prefer to continue teaching after 55 years of age, his pension is increased by one-fiftieth of the amount of his salary for each year of additional service. The widows of retired teachers receive a third of the pension to which their husbands would have been entitled, and this third must never be less than £4. The children of teachers, when both parents are dead, annually receive an amount equal to the pension which the mother would have had until the youngest of them attains the age of 21.

Decree of
May 27, 1897

Salaries being attached to the person of the teacher and not to any particular school, rural teachers are paid upon the same scale as those in the towns. A teacher may, in fact, be the head of a large school and be in the fifth class, with a salary of £40, while another may be head of a small rural school, and be in the first class, with a salary of £80. It is the habit of officials all over the world to complain of their pay, as M. Ferrand truly observed. Undoubtedly the salaries to commence with are too low. On the average a teacher does not receive one of £60 until he is about 32 years of age, or of £72 until he is about 45. In M. Marie Cardine's opinion, the rural teacher could not live, were it not that he also acted as secretary to the Mairie, for which he gets from £8 to £16 a year. Most teachers in charge of a school have a supplementary salary of some kind. Besides the above secretaryship, a rural teacher can act as secretary for the local Savings Bank, and as secretary to the Relief Association (*Bureau de Bienfaisance*), for which services there is of course some remuneration. Occasionally he organises a society for insurance against the loss of stock, and this will bring him in £2 or so. He may also add to his income by doing a little land surveying and by drawing up agreements. During the last few years salaries have been gradually raised, and there is likely to

be further improvement. Although I closely questioned many teachers, I failed to discover any great sense of grievance. The status of the rural teacher in France is in many respects superior to what it is in England. He is certainly better housed as a rule. The fact that he has an assured and official position gives him a feeling of independence. He realises that his future depends mainly upon himself. He is free from the irritation of local interference in the management of his school, and he can appeal against any judgment which he believes to be unjust. I have heard that political considerations now and then cause the Sub-Prefects to treat a teacher with unfairness, but this is a matter of rare occurrence. Such being the general situation, teachers have not felt the need of any powerful organisation for the protection and advancement of their interests. So far as my experience goes, they are devoted to their profession, eager to discuss all that bears upon the theory of education, and anxious to introduce improved methods of instruction. Since they are paid as teachers solely by the State, one possible cause of friction between their neighbours and themselves is removed. Their relations with the farmers and the parents are most friendly. The agricultural and horticultural instruction which they have received at the Training Colleges contributes to this and puts them in touch with their rural surroundings. With tact, and care not to pose as a savant or a professor, the teacher may easily, thanks to his training, obtain considerable influence over the whole population of his commune.

THE AGRICULTURAL INSTRUCTION.

Under the old law of 1850 agriculture might form part of the curriculum of primary schools, and Mr. Jenkins in his Report ¹ C. 3981—1 gives some examples of the extent to which agricultural instruction was given in the Seine Inférieure, the Eure-et-Loir, and the Haute-Marne. These efforts depended solely upon local initiative, and upon the encouragement of local agricultural societies and agricultural committees. As showing the character of what was done Mr. Jenkins quotes the following passage from Mr. Gibson-Richardson's "The Corn and Cattle-producing Districts of France" (pp. 55-58):—

"In the horticultural portion of the show at Chartres, in June, 1877, were exhibited the copy-books of children from some of the schools in the department of Eure-et-Loir. They contained descriptions of the various methods of budding and grafting fruit trees, of the various kinds of wheat grown in the district, the insects, noxious and otherwise, the different grasses, &c., the whole illustrated by the drawings of the pupils, very clearly written and drawn. The pupils varied in age between ten and thirteen, and if these books are anything like a fair representation of the state of rural education in France, it must be far above that of England, and it was not a few books that were exhibited, but a large table was covered with them. At the agricultural meeting

in Paris, in February, 1877, the plan of a parish in Burgundy was exhibited, drawn up by the schoolmaster, in which the nature of the soil on the little plot round the household of each pupil was explained, and the pupils were taught the most suitable methods of cultivating that particular plot of ground.

"The most complete account we have of this kind of education is given by the Vicomte Charles de Hédouville, who describes the system pursued in the canton of St. Dizier, in the department of the Haute-Marne, and which has been at work since 1873. The Conseil Général de la Haute-Marne published in 1872 an elementary book on agriculture, called "An Agricultural Catechism suitable for the schools in the Haute-Marne." After the holidays, in the month of October, the Educational Committee informs the schoolmasters what lessons in the catechism are to be prepared during the winter for examination in the spring; generally ten are selected, forming about fifty pages of printed matter. These lessons are to be prepared by the pupils of the two upper forms: writing the lessons from dictation, and working out the arithmetical problems connected with the lessons, are done during the ordinary school hours; the special study of the agricultural portion of the work is taken out of the ordinary school hours, or on the half holidays. It is not found that this extra work interferes with the ordinary school tasks, as the pupils of the schools in St. Dizier satisfy the inspectors fully, as well as do those of the schools where the agricultural education is not attended to so much, or not at all.

"The degree of success attending this teaching varies, of course, with the skill and knowledge of the masters. Some teach the boys to distinguish between the useful and the useless plants in the neighbourhood; they form collections of those cultivated, the grasses most serviceable, the weeds, the medicinal herbs, and those that are poisonous; these are collected in bunches, duly labelled, and kept in a case, and are renewed yearly as a succession of new pupils follow those who leave. Some have specimens of the various soils and subsoils; seeds of the crops; hemp and flax in their different stages of growth and preparation; sugar-beet preserved in spirit, with its different stages of progress, from the raw beet to its outcome in sugar, &c. Few villages have elaborated a system so perfect as that of St. Dizier, but most through France are working in the same direction, and as two or three years make all the difference in the education of children, that very short period may wholly change the educational condition of the French peasantry.

"When the examinations are completed rewards are given, both to the masters who have been most successful and to the pupils who have passed best. In the latter case, there is a savings bank book, with 10 francs to the credit of the boy. They began at St. Dizier with promising two prizes to the masters and ten to the boys, but the zeal of the masters and the success of the boys have been so great that this spring (1877) they have given five prizes to masters and sixteen to boys."

Major Craigie also in his Report ⁽¹⁾ refers to the local success ^{1 C. 5809} achieved in the department of Calvados, quoted by the Marquis ^{P. 11.} de Dampierre in his Report to the National Assembly in 1875, on the formation of an "Institut Agronomique." It appears that, even before 1875, in four years the number of primary schools competing for rewards offered at Caen alone for agricultural knowledge had been raised from 16 to 77, and the number of pupils from 76 to 477.

From the above it is evident that voluntary action on the part of agriculturists themselves largely contributed to the legislation of 1879. That legislation embodied the recommendations of the special commission on agricultural instruction in 1866, and as these recommendations cover some of the questions now under consideration in England, it may be well to quote them at length:—

1. To introduce at once a course of agriculture and horticulture suited to the department in those normal (*i.e.* training) colleges where it has hitherto been impracticable, and to introduce regularly such teaching in all places, where circumstances will permit of the same.
2. To create in each department a post of professor of agriculture, who will be charged with agricultural teaching in the normal school, the lyceum or the college, with lectures which may be given to schoolmasters and cultivators; to bestow on the holder of this appointment a suitable salary chargeable to the vote for the Ministry of Agriculture and the Ministry of Public Instruction; to select the professors of agriculture from among the candidates who may from henceforth be considered qualified; and in order to secure them in the future, to choose from amongst the best third year's pupils of the normal school those who have a special aptitude for teaching, and to send them for two or three years to a school of agriculture.
3. To stir up and encourage the addition of a garden to such normal schools and to rural primary schools as do not at present possess one, in order to exercise the children in the practice of horticulture; to undertake agricultural excursions once every week, with a special object of study corresponding with the school work of the session.
4. To modify the regulations of the communal primary schools in such a way that in each commune it may be possible, by the fixture of the hours of lessons in the classes, and by the date of the holidays to fit in the class studies with the work in the fields.
5. To advise the prefects to select, as far as possible, teachers possessing a special knowledge of agriculture for those districts where such knowledge may be more particularly applicable.
6. To recommend to the teachers in rural communes to give, by the choice of their dictations, their reading lessons, and their sums, an agricultural direction to the teaching, and from time to time in the classes for adults to give lectures on agriculture accompanied by explanations and advice after the lessons in writing, arithmetic, and spelling.

7. To draw up a general programme of agricultural instruction in each department adapted to its agricultural conditions.

8. To cause the normal schools to be inspected annually by inspectors-general of agriculture, as well as some of the rural schools in each department.

9. To institute and to encourage annual competitions among the pupils both of the primary schools and of the adult classes, and, independently of the ordinary questions of class teaching, to give them at the same time questions on agriculture; to try and assure to the teachers for this latter object, in addition to the usual honorary rewards, a remuneration dependent upon the number of pupils admitted to the competition, and upon the number of prizes obtained by them."

The law of June 15, 1879, under which chairs of agriculture had to be established in every department, provided that agricultural instruction should be obligatory in all primary schools three years after its complete organisation in the training colleges.

In its Report for 1881 the Société des Agriculteurs de France, which has spared no effort to promote and encourage agricultural education of every grade, published some valuable remarks on the means of instruction at the command of primary teachers:—"Teachers in general have a garden attached to the school, some of them have an experimental plot as well; that is good, but it is not sufficient. If the teacher is really to give the children who are entrusted to him an *agricultural education*, and, as he teaches, explain the application of the elementary ideas of agriculture to local circumstances, he must be familiar with those circumstances, he must understand the different properties of the soil, the physical peculiarities of the land, &c.; further, to make the explanations intelligible and clear, a plan of the different properties of the soil and its conformation must be before the eyes of the teacher and his pupils in the class. It will be useful, then, for the teacher always to have at his disposal in class, besides the pictures of weights and measures, trees, birds, useful and harmful insects, the specimens in the school museum, the collection of the dried plants of the commune, an *agronomic-agrologic* chart of the commune. With such charts the teacher who cannot often arrange agricultural walks might at all seasons and at any hour give his lesson as it were upon the land itself."¹

¹ Comptes rendus des Travaux de la Société des Agriculteurs de France, Tome xii., Annuaire de 1881, p. 98.

² Enseignement Agricole, ed. iii., 3.

Most of the departmental councils drew up programmes for agricultural instruction in accordance with the directions in Article 10 of the Law of June 15, 1879, but they were all too ambitious, practically covering the whole field of agriculture. As M. René Le Blanc justly remarks in his admirable book on agricultural education:² "As one reads these vast programmes one naturally asks what is one to teach in the higher schools if the whole of the theory and practice of agriculture is to be taught, as they suggest, in the elementary school." In their anxiety to omit nothing which it would be profitable for the

future cultivator of the soil to know, the framers of these programmes committed a fatal mistake. Teachers were bewildered. They were at that time rarely qualified to give any agricultural instruction at all, and the natural result was that but little progress was made. The exclusion of agriculture, except as an optional subject after December 21, 1891, from the examination for the *certificat d'études primaires*, left the teachers without any special reason for teaching it. M. René Le Blanc always rightly maintained that if teachers are to be induced to qualify themselves for, and to take up new subjects, there must be some sanction for them: a fact which should not be overlooked in England.

The whole question was next considered at an International Congress in Paris in 1889, when the following resolution was passed:—"Agricultural education at the primary elementary school, by means of frequent lessons, exercises, readings, and above all, by means of the school museum, the garden, and school walks, will rest essentially upon the cultivation of vegetables." In 1896 the well-known circular upon "The teaching of elementary ideas of agriculture in rural schools" was issued. It is too long for insertion here, and may be read in full in the Report of the Irish Commission on Manual and Practical Instruction in Primary Schools.¹ It emphasises the necessity of basing such instruction in agriculture as can be given in the elementary school upon "observation of the everyday facts of rural life, and upon a system of simple experiments appropriate to the resources of the school." "The work of the elementary school should be confined to preparing the child for an intelligent apprenticeship to the trade by which he is to live, to giving him a taste for his future occupation; with this end in view, the teacher should never forget that the best way to make a workman like his work is to make him understand it." In short, the underlying principle of the whole scheme is that "*le travail n'est attrayant et fructueux que si l'intelligence y prend une part aussi grande au moins que la force ou l'adresse manuelle.*" The following indicates the nature of the lessons admissible in carrying out the official programme during each half year in rural schools:—

¹ C. 892
1898, p. 2

Elementary Course.

(Seven to nine years of age.)

Object lessons. As far as agriculture is concerned, the only thing necessary is that the objects of the garden should be called into requisition in the same way as those of the class room.

Middle Course.

(Nine to eleven years of age.)

The duration of the middle course is at least two years for each pupil. In the first year, that is, at nine years old, the child is incapable of acquiring more than very rudimentary

ideas of science, or of their application to agricultural matters. It is only after the introductory instruction, or, in other words, only in the second year and with children of at least ten years of age, that the teacher can begin to deal with ideas of agriculture properly so called; and even then, in accordance with official directions, he should proceed by way of reading lessons, object lessons, and school walks.

The division of the instruction into two years presents no difficulties in the case of schools which have several classes, but in rural districts, where in most schools there is only one teacher, the lessons in science and in agriculture will necessarily be common to the whole class. The lessons must, therefore, include whatever is appropriate to each group of pupils, and must be in the form of a concentrated whole, from which each group will take that portion which is best suited to its mental capacity and development.

First Year of the Middle Course.

First Half-Year.

It would be difficult to give "an idea of the principal functions of life"—to give any satisfactory description of respiration, for instance, to children ignorant of the properties of air, not even knowing whether a gas is a material thing or not; as a preliminary, therefore, "the three states of matter" should be examined into.

The elementary principles of natural and physical science can be made to form the basis of parallel lessons that will mutually complete each other.

With regard to natural history, animals are to be treated of first; the consideration of man will follow when the ideas relating to air and to combustion have been well fixed in the children's minds by experiments.

I. *The Three States of Matter.*—Some simple demonstrations are indispensable to induce observation and comparison of these three states. Plunge a wine-glass, or a funnel with the opening downwards, into some water; then let the air escape, when the bubbles will be seen or the pressure felt; or secure the air blown or breathed into a vessel of water; transfer it to another vessel and measure it approximately. These are necessary experiments and can be performed anywhere without expense. Similarly with the following:—Produce steam, condense it—in other words, distil water, and observe the change that takes place; or prepare a little oxygen and produce combustion, increase the vigour of this by a draught, identifying the products; or demonstrate atmospheric pressure or the elasticity of air. Anything beyond this can be done later on.

II. *Animals.*—The teacher should stimulate the curiosity of the children by conversing familiarly with them, and telling them about the animals which they see every day. He should select the most striking features in the history of each. The

dog and the horse will furnish matter for several explanatory and descriptive reading lessons, and for some little written exercises, done, if necessary, with the help of pictures. The various species of the dog should be compared; the horse should be compared with the donkey, the cat with the lion and tiger, &c.; the habits of farmyard fowl, the periodic flight of the swallows and other migratory birds; the history of the metamorphoses of the frog; those of the cockchafer, as well as the damage it does; the silkworm, and the bee, and their products, &c.—all these should form a basis for most interesting reading lessons and conversations.

III. *Man*.—A short description of the human body should follow these lessons on animals. This might be begun before the experimental lessons described above are finished, but it is only when these lessons are completed that the functions of nourishment and respiration should be dealt with. Beyond this the instruction should not go, but some advice on matters of health might be added.

Second Half-Year.

This being the summer season, the pupils can be brought into contact with the actual objects required for the experiments or demonstrations. Sometimes the children or the teacher can bring them into the class-room; sometimes both teacher and children can go out to observe the objects. *In rural districts an object-lesson should in no case be given without having the object itself before the children's eyes.*

I. *Plants*.—It will naturally be well at first to draw the pupils' attention to an active phenomenon—that of germination, which is easy to produce and easy to follow in its different phases, especially in spring-time. A bean, or a grain of corn, an acorn, or a horse-chestnut, put into damp moss or sand, will produce convenient specimens; or by making the experiment, as is usually done, in growing plants in water—the seed being supported by a cork floating on the water—it will be quite easy to see the development of the little roots and of their essential organs, the rootcap and the absorbing hairs.

It is from nature also that the branch, the leaf, and above all the flower, are to be studied. In the latter case, for instance, the first thing to do is to put a specimen of the flower chosen into the hands of each of the children; then under the general guidance of the teacher, each child should, either with a pen-knife or else an ordinary pin, separate the flower into its parts—calyx, corolla, stamen, and pistil.

A few well-chosen examples will suffice to give an idea of the families of plants which are more particularly interesting on account of their good or bad qualities, *i.e.*, useful and noxious plants.

II. *First Ideas of Agriculture*.—Such ideas, to be useful to children who have not yet reached ten years of age, must be very

limited; they should aim at attracting the child and serving him for a starting-point, with a view to prepare him to use his faculties of observation and to familiarise him with the phraseology that will be used in the more systematic lessons of the following years.

Second Year of the Middle Course.

The instruction should be given on the same lines as in the first year; the programme to be completed as follows:—

I. *Elementary Ideas of Science.*—The study of combustion should be extended to that of carbonic acid gas, the presence of which in limestone should be demonstrated. Some chalk and a few drops of a mineral acid are all that is necessary for making the following experiments or demonstrations:—The changing of chalk into quicklime (the school stove will provide sufficient heat), showing the loss of weight by comparing it with a piece of chalk of similar proportions to the one first used; the action of water on quicklime; the properties of slaked lime, white-wash, lime-water; the production of carbonic acid gas; the re-formation of chalk; the separation of a given quantity of soil into clay, on the one hand, and silica and limestone on the other. By means of a little hydrochloric acid, which will dissolve the limestone, the silica can be isolated; the lime can then be reprecipitated by means of a solution of carbonate of soda. This easily explained experiment requires only a little care to be well carried out.

II. *Elementary Ideas of Agriculture.*—Investigation, particularly during school walks, of the principal kinds of soil.

The teacher should devote himself to making the children observe that plants, as well as animals, require nourishment in order to live; and to prove this, some plants should be grown in pots and in some corner of the school garden. The following experiment will serve as a starting-point:—Sow some seeds of rapid growth, early beans for instance, some in good soil with a sufficient quantity of suitable manure added, some in sterile material, such as exhausted soil, sand, or gravel, or even glass broken into pieces about the size of gravel. The need for manure will thus be demonstrated; its composition will be dealt with later on.

The first ideas relating to ordinary agricultural implements and operations should be acquired, to begin with, during country walks; they are to be developed in the more systematic lessons indicated in the programme for the Higher Course.

The Higher Course, properly so called, is seldom organised in rural schools. As a rule the more advanced or older children constitute a sort of upper division of the Middle Course; but, however that may be, the following rule will serve for guidance:—Children of 12 or 13 should receive more advanced agricultural instruction than is comprised in the programme for the Middle Course. Teachers should therefore add to the foregoing, for

their older pupils, as much as they can of the following programme. It will present no great difficulties, provided the pupils have been well grounded in fundamental scientific ideas by means of simple experiments carried out in the class-room, and provided they have been trained to observe from Nature.

Higher Course.

(11 to 13 years of age.)

The ideas of the physical and natural sciences given in this course are to be a recapitulation and extension of the Middle Course. As regards man and animals the extension will, of course, be towards knowledge relating to hygiene; and as regards plants, towards some ideas of vegetable physiology and some elements of chemistry. The following is an indication of the subject matter of the lessons for each half-year, the ideas of natural science and of physical science being given in the winter months, and concurrently, so as to afford mutual support and explanation.

First Half-Year.

I. *Animals.*—The principal distinctions by which animals are classified should be shown by examples taken as far as possible from the animals known in the country, preference being given to those which are either useful or the reverse. The domestic animals will naturally have the first place, and the teachers should seek to impress upon the children's minds the principles upon which are based the rules for the health and feeding of stock.

The study of the principal organs may be facilitated by the direct observation of a dead animal. Some teachers are able to preserve the digestive organs of small animals, or even a skeleton, and thereby to enrich the school museum.

II. *Man.*—The instruction in anatomy given to children should be such as to convince them of the necessity of observing the rules of hygiene. It should deal with digestion, circulation, respiration, and with the relation of the senses to the nervous system. Exaggeration is to be avoided, as also all empiric prescriptions, which should not be confounded with hygiene, far less with the science of medicine.

III. *Elementary Ideas of Physical Science.*—These are to be impressed upon the children's minds by means of simple and inexpensive experiments. This part of the programme is to be carried out chiefly in towns and industrial centres. In the country, such instruction may be limited to demonstrations, which bring out clearly the principal effects of heat, of light, of electricity, and of gravitation. The all-important matter here is to *stimulate the children's curiosity*, and to select the subjects of experiment and illustration from those phenomena which are most easy to produce or to observe.

IV. *Elementary Ideas of Chemistry.*—The experiments that can be made with extremely limited apparatus are very numerous. In selecting experiments those should be chosen which have a direct bearing on agriculture, the substances which nourish plants being considered as the most important. From wood ashes, potash can be extracted; a calcined bone can be changed into soluble phosphate by being treated with dilute hydrochloric acid; it can then be re-converted into soluble phosphate either by neutralising the acid used, by a base, or simply with carbonate of soda. Lime will detect the presence of ammonia in the compounds of ammonia, which are used as manures. The pupils will learn to distinguish the principal artificial manures of commerce, the nitrates from the compounds of ammonia and potash, the superphosphates from slag, &c. The really important thing is that *the scientific terms, which have become part of the current language of agriculture, should convey a clear and definite meaning to the children who are about to leave the rural school.*

Knowledge of the principal manures will be much facilitated by the use made of them in the summer half-year, in the various experimental cultivations.

V. *Minerals.*—Ideas regarding the soil, rocks, and kinds of land should be given partly by means of object lessons, the objects being taken from the school museum, and in connection with some of the chemical experiments, and partly by means of school-walks, the latter being the most important part of the instruction.

VI. *Agriculture and Horticulture.*—The actual school-room lessons should be begun before the spring time. They should bear upon matters essentially connected with local cultivation. Each lesson should deal as far as possible with the things which the children have already seen and examined. The teacher must therefore begin with the subjects that have been entered upon in the Middle Course, and which have been explained during reading lessons, walks, &c.

He should then continue throughout the summer months, co-ordinating the lessons with practical exercises, school-walks, &c. The subject-matter of the lesson on agriculture or horticulture, properly so called, should be identical with the object of the last walk, or of the next one, and with that of the practical exercise assigned for the same period.

Second Half-Year.

I. *Experimental Cultivation.*—Arrangements for this purpose should be planned and carried out in such a manner as to bring out clearly the following fundamental truths:—

(1.) Air should penetrate easily into the soil, because roots cannot dispense with oxygen; they breathe as leaves do, they should always find suitable nourishment, that is to say—manure should be thoroughly mixed with the soil wherever roots develop.

(2.) In all arable soil, four substances, *nitrogen, phosphoric acid, potash and lime* are sufficient to provide for the entire nourishment and full development of cultivated plants.

(3.) The cultivator need not try to furnish the soil with any substances other than those indicated above: these will prevent arable land from becoming exhausted; even if they are put into it in a purely mineral form; nevertheless, in a purely mineral form they may injuriously modify the physical properties of the soil. Organic matter, far from being useless, keeps land in a state favourable to the aeration and development of roots; moreover it operates advantageously on the nutritive properties which the soil contains. Accordingly in order to supply a soil most efficaciously with the four substances in due proportion, the first manure to be used is dung: it is to be supplemented by suitable chemical manures.

(4.) A manure is suitable to a soil if it puts into it that which the particular soil lacks for the nourishment of the plants to be grown. Thus the composition of a good manure depends not only upon the kind of cultivation that is required, but also on the nature of the land; it is not possible to make up a manure that will suit all soils even for the same species of plants. Formulas or precepts said to be infallible and universally applicable are no more to be trusted than remedies to cure all diseases.

(5.) To produce fruitful harvests, the soil, after being manured, must contain the four nutritive substances in a proportion that depends upon the species of plant to be grown. Modern agriculturists should know that *excess* of one of the four substances is always *useless and costly*, and, moreover, that *it may become injurious*, if any one of the other three is lacking in quantity. In other words, the *excess of one of the substances is as injurious as its insufficiency*, the development of the plant depending upon that element of which the smallest proportion is to be found in the soil.

The first experiments in these demonstrative cultivations, which are very elementary but fundamental, are to be made in pots, or, better still, in wooden boxes, the children themselves helping.

II. *The Experimental Plot.*—It is impossible to attach too much importance to the necessity for prudence in the organisation of experiments which are designed chiefly in order to show agriculturists how to set about obtaining from a given soil a more remunerative yield than that which is got by the ordinary methods.

Knowledge of the soil, therefore, is necessary before deciding upon the fertilising substances to be employed in experimental plots. Accordingly, teachers in carrying out these operations, would do wisely to follow the advice of a special professor, or of a practical expert. They should carefully avoid using excessive quantities of manure, and should take the ordinary custom of the district as the standard of comparison. Thus even the simplest

of experimental plots should always include the three following divisions:—

- (1.) Without manure.
- (2.) Only farmyard manure in the quantity usually applied in the district.
- (3.) The same quantity of farmyard manure, with the addition of artificial manures in a proportion determined by the nature of the soil, and that of the plant under cultivation.

In other plots, for the sake of supplementary information, the nature of the manures applied to the third section might be varied by leaving out one or more of the constituent elements.

It is as an assistant in the work of the Departmental profession of agriculture that the teacher works at the experimental plot; but it is in his own garden that he should carry out the most convincing experiments, by devoting himself to the propagation of the best kinds of vegetables and fruit.

The pupils should participate in the operations to an extent regulated by their age and their manual capabilities, as well as by their scientific knowledge. No hard and fast rule can be laid down. Sometimes most of the pupils will merely look on at the pruning, grafting, &c., of a fruit tree; sometimes the older pupils will themselves use the pruning knife. *The work must be rational, requiring the exercise of the intellectual faculties as well as the labour of the hands.*

III. *School-walks.*—These should be both preparatory and complementary to the class-room lessons on minerals, on rocks, on the principal kinds of soil in the neighbourhood, on useful or injurious insects and plants, on the essential operations of cultivation and the manipulation of agricultural implements, on the distribution of manures, on sowing, on crops, &c.

The important thing in observing or investigating agricultural operations is to bring out the application of the scientific ideas that have been acquired, or are about to be acquired, by means of the ordinary lessons. For instance, it is not enough to show how ploughing makes the land lighter; it should be carefully explained that the breaking up of the soil assists the development of the roots, enables the manures to reach them, and that the aeration that it causes ensures to the roots a sufficient supply of the oxygen, which they need. The same course should be followed in explaining most of the other agricultural operations.

No doubt the child, on leaving the elementary school, even after completing the normal period of school life, and having attended regularly, will have acquired no more than what, from the point of view of the science of agriculture, are merely elementary ideas; but if the study of it has been made attractive and interesting to him, he will continue it as far as he finds means to do so.

The introduction into popular libraries of well-chosen works on agriculture, and of publications specially suited to the cultivation of the districts, constitutes one of those means, but that will not be enough. It is necessary that the youth should not only

retain, but should complete and extend the knowledge he has gained as a child; and this he will do with a facility increasing with his years, if the intervals in his subsequent education are not unduly long. Too much, therefore, cannot be done to support and encourage the zeal of those teachers who re-open schools for their former pupils on some of the long winter evenings. Familiar chats, readings, well-selected practical exercises, an occasional meeting with experiments done or planned—all this serves to stimulate among young people an intellectual activity of real service to progress.

As with all other instruction, so with that in agriculture, the work of schools must remain incomplete unless provision be made for its continuation and development.

It cannot be said that the circular was well received by the majority of teachers. Some of them welcomed the suggestions with enthusiasm, but the greater part remained cold and suspicious. Not a few of the inspectors even misapprehended the whole purpose of the agricultural instruction. One of them, a most enlightened and advanced educationist, wrote:—"Je veux parler du rajeunissement de l'enseignement agricole. C'est la grande préoccupation du moment. Elle nous a envahis déjà bien des fois, mais elle renaît plus vivace. Aujourd'hui plus que jamais à l'école élémentaire, nous ferons des agriculteurs. Si seulement ils savaient tous lire!" The teachers complained that their time-tables were already crowded, and asked if they were to abandon morals, or the French language, or arithmetic. The school-walks would disorganise the classes, and they were afraid of failing with the experiments. The general attitude was one of which we have had experience. Under these circumstances progress was only slow, and M. René Le Blanc admitted that "l'enseignement agricole, dans le plus grand nombre des écoles élémentaires, où il existe, n'a été jusqu'ici qu'un enseignement de mots: il est temps qu'il devienne un enseignement de faits et de faits scientifiques."⁽¹⁾

The Departmental Councils were again requested to revise their programmes by a Ministerial circular of May 12, 1898, and were warned against exaggeration. They were advised to seek the assistance of members of the teaching profession, and of others with practical knowledge of the subject.

What, then, is the present position?

Before visiting the rural districts I had the advantage of a long interview with M. Grosjean, Inspector-General of Agricultural Education. In his opinion the schemes are too ambitious as a rule, and the instruction too theoretical. Any attempt to teach agriculture, as such, in an elementary school is doomed to failure, but horticulture to some extent may be taught. The aim of the instruction should be educational rather than technical. The less the children use text-books the better, a view now generally held, and forcibly expressed by M. Léon Vassilière, successor to M. Tisserand, as Director of Agriculture: "c'est au maître qu'un bon livre d'agriculture est indispensable et non à l'enfant, auquel il est plus nuisible qu'utile." At the same time M. Grosjean

¹ L'enseignement Agricole. Ed. I p. 30.

considered that excellent work is being done in many of the schools—some of which I had the opportunity of seeing—and he was convinced that the value of such instruction would be more and more appreciated in the rural districts. It was gratifying to find that he cordially approved of the views put forward upon the subject by the Agricultural Education Committee. From the Marquis de Vogué, President of the *Société des Agriculteurs de France*, from the Comte de Luçay, and other leading agriculturists, I learned that of agricultural education in its proper sense I should find but few traces in the village schools. This turned out to be perfectly correct, and the use of the term "agricultural" in connection with the instruction is to be deprecated. It has led to much misapprehension of what is really intended, and has caused people to attempt what the elementary school can never do. Disappointment has been the inevitable result. A more rational view, however, is now taken of the possibilities of the elementary school, and no one is doing more than the Marquis de Vogué in his own department of Cher to encourage teachers to provide the kind of instruction that is required.

It must be admitted that in the majority of rural schools the experimental and practical work has not yet assumed very large proportions. This is seldom due to any disinclination on the part of the teacher—I met none who were not anxious to do all that lay in their power—but many of them had left the training colleges before the agricultural and horticultural instruction was provided at them, and they are not qualified for these modern requirements. In some of the training colleges the training continues to be too theoretical to be of much service. When the teacher is qualified, the parsimony of the Municipal Council may block the way. A demonstration plot is not a necessity, but certain apparatus, the total cost of which does not amount to more than about twenty francs, is required for the simple experiments in science. Even this small sum is frequently refused. The secularisation, moreover, of the public schools has alienated many of those in the rural districts who are in a position to assist them by gifts of money and otherwise. These, however, are all accidental or local difficulties, and do not affect the value of the system in itself.

It may be well to give a few examples of the methods pursued at schools of different sizes under varying conditions. At the little village of Arnières (Cher) I found a mixed school of 98 pupils with a middle-aged teacher and one assistant. The teacher was evidently a good practical gardener, but with no particular scientific knowledge. His garden was well kept, and the boys work in it from time to time, receiving some instruction in budding and grafting, and also in bee-keeping. No attempt was made to carry out any of M. Le Blanc's experiments, the teacher giving the somewhat odd reason that he was afraid of an accident, in which case he might have to compensate the parents. Judging from the specimens of the boys' essays which I read, the in-

struction seemed to be based upon sound principles, and the tone of the school was excellent. There was a very flourishing association for the protection of birds, &c., and all satisfactory pupils on leaving join the *Société des Anciens Élèves*.

At Bois-Leroy (Eure) there is a small boys' school of 35 pupils under one teacher. There is no upper division, as it is forbidden to have one unless there are at least five boys who have obtained the *certificat d'études primaires*, and, as already explained, few children remain at school in the rural districts after getting the certificate. The lesson in agriculture only lasts from 4 to 4.30 p.m. on Fridays, but a good deal of practical work is done in the teacher's garden. A portion of it is reserved for the children where they grow various vegetables. Every year the elder ones make several grafts and have lessons in budding. Country walks are frequent to observe the agricultural operations of the season, and each child writes afterwards an account of what he has seen and been told. The result of all this is that hardly any child is ever absent, except through illness, and the school is immensely popular with the parents. During the last two years it has won four silver and three bronze medals. M. Le Blanc's experiments in pot-culture are said to have been of great assistance in stimulating the children to take an intelligent interest in the work. As is usual, the practical instruction is given after school hours, or on the holidays. The teachers do not seem to feel this any hardship, and say it is the pleasantest and most profitable time which they spend with their pupils. There is never any difficulty in getting the boys to be present; in fact, they complain bitterly if anything keeps them away.

One of the best schools which came under my notice was that at Olivet, about four miles from Orléans, to which M. Ferrand courteously accompanied me. The school staff consists of M. Lasseray, the Director, and two assistant masters. There are 140 scholars on the register, and here again the attendance is extremely regular. Frequently a whole week passes without there being any absence. There is no upper division, but some few boys remain for a year after getting the certificate. Theoretical instruction in agriculture is given twice a week to all the pupils, followed, in the case of the 40 boys in the first-class, by practical work in the school garden after school or on Thursday morning. This work consists in planting, pruning, and grafting. All the trees and vines grafted by the boys are their own property; they either take them to plant in their parents' gardens or give them to friends. Each boy of the first class makes a collection of the principal plants of the district, which are studied from various points of view. The school has a collection of some 700 varieties. In the museum there are 150 varieties of the chief insects of the country. These are not classified scientifically, but according to their usefulness, or the injury they do to vines, cereals, vegetables, fruit trees, forest trees, forage plants, &c. In March, April, May, June, July, and August visits are paid to horticultural establishments, farms, or to the departmental vine

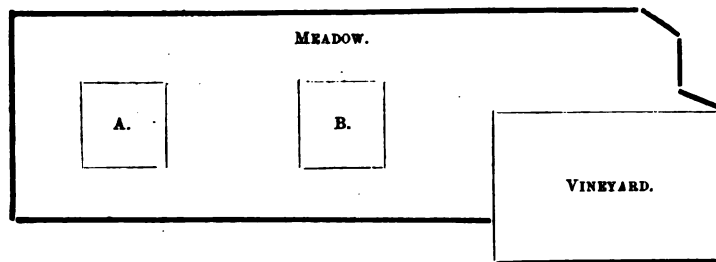
nursery. These excursions are made the occasion for collecting plants and insects, or for a lesson in land surveying. Such a teacher as M. Lasseray is no doubt exceptional, and he has won innumerable prizes for his agricultural instruction, including a silver medal and £12 from the Ministry of Public Instruction, a collection of books, and the order of "*Chevalier de mérite agricole*" from the Ministry of Agriculture, and a silver-gilt medal, together with £2 from the *Société des Agriculteurs de France*. He admits that the practical instruction in the majority of rural schools leaves much to be desired, but he is convinced that it can be made of the greatest value, not merely in initiating lads into their future calling and teaching them to understand and love the country, but also in inspiring those who will not cultivate the soil with a love for gardens, trees, and flowers, which will afford them a pleasanter and healthier attraction than the public-house. In his opinion, the training colleges, although they give admirable theoretical instruction, are still too weak on the practical side. The time of the students is too much occupied with other studies, and the practical work necessarily suffers.

Instruction of quite a different type is provided at Massay (Cher). This village is one of those which has suffered most severely from the phylloxera, a vineyard covering some 500 acres being entirely destroyed a few years ago. The school, with 122 pupils, has upper, middle, and elementary divisions. M. Aupetit, the head teacher, takes the upper division, in which there are usually about a dozen boys, and the second year of the middle division. Owing to the poverty of the district, the attendance falls off from early in May until the end of October, for children must earn what they can during the harvests. That the school itself is not unpopular is shown by the fact of its having an upper division. Attached to it is more land than usual. On one side there is a small field about two-fifths of an acre in area; on the other side the school garden of about 20 perches, a meadow of about 48, and a vineyard of about 28. This year the field is divided into four equal portions, and cultivated as follows:—

POTATOES.		SPRING BARLEY.	SPRING BARLEY.	POTATOES
Without manure.	Stable manure.	Without manure.	Superphosphate.	Fully manured.

This affords ample opportunity for demonstrations on the different phases of cultivation and the growth of plants, consequently M. Le Blanc's experiments are felt to be unnecessary, except in a little pot culture, for use in the science lessons on germination, leaves and flowers.

The other part of the land is divided as follows :—



A and B are kitchen gardens. This year A had a good dressing of farmyard manure, and B, which was similarly treated in 1899, has a dressing of chemical manure (superphosphate, nitrate of soda, and chloride of potash). The vineyard is planted half with vines on their own roots, and half with grafts. Last year it had a plentiful supply of stable manure, and this year a chemical manure composed of 50 per cent. nitrate of soda, 25 per cent. superphosphate, 12½ per cent. chloride of potash, and 12½ per cent. sulphate of ammonia. The children thus see theory verified by practice, and the elementary ideas which they acquire in this way should lay a solid foundation for future knowledge. These experiments have been of assistance in re-establishing the vine, and in showing that the American variety is not unsuited to the soil. Although M. Aupetit is enthusiastic about agriculture and horticulture, he very truly and modestly says that "if we humble primary teachers, exaggerate our rôle as agricultural instructors, we shall make a great mistake. We cannot make agricultural experts of children from ten to twelve years of age. We can only try to inspire them with the wish to know more, stimulate their curiosity, and impress upon them the truth that routine kills progress, while science assures it."

The International Congress of 1889 unanimously rejected the idea of technical agricultural instruction at the elementary school. Demonstration or experimental plots in their proper sense are not needed. The school garden is usually large enough to fulfil every purpose, and the teacher, who knows how to make his influence felt, rarely fails to get a little extra land where his instruction is seen to be a success.

Cours Complémentaires.

Higher standards, the course in which lasts for a year, and of which the director must possess the *brevet supérieur*, are rarely to be found in the rural districts. There are a few at small country towns. Loiret, for instance, has three, at Beaugency, Chateauneuf, and Meung, in which special attention is paid to agriculture. The programme is the same as that for the *écoles primaires supérieures*.

First year : General agriculture—soils, manures, etc. General cultivation—vine-culture. Forestry and bee-keeping; useful and noxious insects.

Second year: Animal life—poultry-keeping, etc. Book-keeping. Practical botany.

At Meung the higher standard has ten pupils, and the upper division of the elementary school fourteen; these two classes are held in the same room, and have certain lessons in common, particularly in agriculture. Instruction in this subject is given for an hour and a half twice a week by a special professor of agriculture from Orléans. The ordinary school staff consists of M. Bergeron, the headmaster, and three assistants. Annexed to the school is an experimental plot of 5,400 square metres, of which the agricultural professor has charge.

When visiting Nogent-le-Rotrou (Eure-et-Loir) I had a very striking instance of the influence which a competent primary teacher may exercise upon the whole agriculture of his neighbourhood. M. Nalot is the director of the elementary school which has a higher standard. As I was talking to him in the class-room, and asking the children various questions, a farmer appeared and begged him at the earliest moment to go and advise him about some of his crops. This M. Nalot informed me was a frequent occurrence, and, as we were walking in the afternoon to one of his experimental plots about 2½ miles off, I could tell by the manner in which the farmers and labourers addressed him that he was a recognised authority and extremely popular. So impressed was I with the character of his work, that I wrote subsequently asking for a detailed account of his methods. The following extracts are taken from the very long letter, which he kindly wrote me upon the subject:—“There are 228 scholars on the register, 12 of whom are in the higher standard, all of course provided with the *certificat d'études primaires*, and having spent at least a year in the upper division of the elementary school. Theoretical instruction in agriculture is given to all pupils from my own book”—(a copy of which M. Nalot courteously gave me, and which is well planned)—“and practical instruction to the first division of the middle course, the upper division, and especially to the higher standard. It includes pruning, layering, and grafting vines as well as all other trees capable of being grafted. This is done in the school garden, where the pupils also help in the cultivation of all the vegetables grown. Just now my boys of the higher standard and I have potted 80 varieties of chrysanthemums, for which we have composed an excellent manure in the following proportions:—24 grammes of nitrate of soda, 36 of chloride of potassium, and 61 of superphosphate. The quantity to be applied is from 80 to 100 grammes the square metre. But as all the working people cannot procure this chemical manure, I have made another which we use as well as the first. Everybody can get it. It is made thus: put about a pint and a half of soot into a small bag, and some fresh cow dung into another bag of the same size, and place them both in a tub containing about 4½ gallons of water. Use this twice a day for watering the chrysanthemums, and they grow splendidly. All the boys take this recipe home and are proud of it. Those

in the higher standard, and the best workers of the upper division, accompany me every Friday to one of my experimental plots. This is a résumé of the work which they do under my direction: first survey the field and mark it out into six equal portions, as follows:—

Total area about 48 perches.

Standard plot without manure.	Completely manured, Nitrate of soda, Super- phosphate, Chloride of potassium.	No Nitrate.	No Super- phosphate.	No Chloride of potassium.	Farmyard manure.
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Then prepare the land and keep it clean. For instance, in the experimental plot which you visited, you remarked that there was a lot of charlock. The following Friday we prepared a solution of about 6½ lbs. of sulphate of copper to about 30 gallons of water and did some spraying. Two days after, on the Sunday, the cultivator of the plot came to tell me that there was not a trace of the charlock to be seen and that the oats had not suffered any injury. The lads were very curious and begged me to take them to see the results with their own eyes. A successful operation like that must have a good effect upon both children and cultivators in encouraging them to repeat it whenever the need arises. In the same field we had some experiments in barley growing with different manures. The results are calculated by the pupils as a lesson, and are then copied into their note-books. They will be published later in the Bulletin of the *Syndicat Agricole* of the department. In our walks to the experimental plots, the boys always make notes once a month of the state of the vegetation, and thus we form a complete diagram of its variations each year. Advantage too is taken of the walks for lessons, which are previously prepared by the master, on Botany or Insectology. This year we have experimental plots for oats at Maison-Neuve, which you saw, and for wheat at Bénissier: a field of oats at Souane, to test the effects of nitrate of soda, for the competition organized by the *Comice Agricole*. There is also another field of half-an-acre for a competition in barley growing. Besides these fields, which have been entrusted to me by friends amongst the farmers, other farmers, on my initiative, who have followed my instructions and witnessed the results, have started experimental plots on their properties, which enables them to get a practical analysis of their soils. I am glad to say their number increases every year. There are now seven altogether. I don't include horticulturists and amateur gardeners. There are so many of them who come to me, that just now, even before breakfast, I had to put my pen down and go to sulphate the vines of two neighbours who are interested in agricultural matters. As to the part which the teacher can play in agricultural education, and the effect upon the neighbourhood of what is taught at the primary school—in

my opinion, and I am quite sure of it—the primary teacher ought to be the chief person to popularise agricultural education in the rural districts. On all sides there is prejudice and routine to overcome. If the schoolmaster is to have the authority and prestige, which he ought to have, amongst all the cultivators, the amateurs, and the workmen with their tiny scraps of garden, he must concern himself with their common labours. He must not be ignorant of the needs and life of the people. It must not be possible to say of him, as it is of the Parisian or the Londoner, ‘he eats bread, but he doesn’t know how one gets it!’ If the French, or English, or any other teacher, who is brought into such close relations with the majority of people, can give advice upon the various methods of cultivation, he will soon come to be consulted by everyone on other matters. Thus he may inspire a love for his country, which people will be loth to leave for the town, which promises so much but does not keep its promises. . . . In every school the master ought to have a few experiments in pot culture every year, and the pupils should take notes every month of the growth, &c., comparing the results with the treatment which each plant has received. If some special prizes are offered by the authorities or by some agricultural society, as an encouragement, there is no doubt of the popularity of the instruction, and the commune, which is willing to promote this kind of education, will afterwards be certain to reap the benefit of the expense which it has incurred. In such a matter as this you are sure to succeed, for you are far more practical in England than we are. As to the training colleges, the agricultural instruction given at present in the majority of them does not satisfy the requirements. To-day all the training colleges have, as agricultural professors, learned experts, and very distinguished men, like the one for this department, who was my master and in whom I have absolute confidence. But most of these professors, under the impression that they are addressing young people who have been studying science for a considerable time, think that they ought to give them a higher course of instruction corresponding to that which follows on the three divisions of the primary school. As theory this would be perfect, but unfortunately the practical work is not co-ordinated with it. In spite of the knowledge of the scientific laws, upon which all cultivation depends, there is a lack of practical experiments. An example will make you understand better how in my opinion this instruction ought to enter into the programme for future teachers. Up to the present time I have found the students who come here as assistants from the training colleges altogether ignorant of the principal elements of chemical manures. If they know them at all, they know nothing of their composition, or practical value in agriculture. My proposal is this. Take a training college with 15 students in each of the three years of the full course. The garden should be, and generally is large enough to be divided into 15 plots of 20 perches each. The plots should be assigned to groups of three students, and each group should cultivate its plot under

the direction of the professor of agriculture. But as there would not be work enough for all the students, some of them should be told off to destroy weeds, like charlock, with sulphate of iron or sulphate of copper, and compare the results. Others should be charged with the duty of destroying cryptogamic diseases which do so much harm every year to our vines and apple trees. If the college garden is too small, one could easily find cultivators in the country near, who would be only too glad to allow these experiments to be made on their land. In this way the young teachers when they go to a village school will be already familiar with the most important agricultural operations, and be able even to assist the cultivators. But let them beware of offering advice in the first instance! Little by little, if they do not pose as experts or professors but act with tact, their influence will grow; they will be beloved by their pupils; the cultivators of their own accord will seek their assistance and they may do much to improve the agriculture about them."

Rewards to Teachers and Pupils.

By a decree of January 30, 1891, the whole country is divided into four districts, in each of which in turn the competitions for the prizes offered by the Ministries of Public Instruction and Agriculture to the masters and mistresses of primary schools for instruction in agriculture and horticulture are held. The prizes are as follows:—

From the Ministry of Public Instruction:—

First prize—Medal and £12.

Other prizes—Medals and sums varying from £4 to £8.

From the Ministry of Agriculture:—

(To teachers recommended by the Ministry of Public Instruction and the examining body)—Silver gilt, silver and bronze medals.

No teacher can receive a medal and money prize from the Ministry of Public Instruction, who has not already received a medal from the Ministry of Agriculture. The first prize can only be won by the same teacher twice. The masters and mistresses in all primary and higher primary schools, whether directors or assistants, are eligible to compete. This year the competition is being held in the southern district; next year the district will be that in which the departments of Cher, Eure, and Seine Inférieure are situated. According to the Ministerial Circular of January 18, 1900, all intending candidates for 1901 must send in their names before August 1, 1900. As soon as the names have been handed in, the Departmental Professors of Agriculture visit the schools to inspect the gardens and demonstration plots. The number of prizes awarded depends solely upon merit, and is not proportionate to the number of candidates. All particulars have to be sent to the Ministry of Public Instruction by September 1, 1901.

Subjoined is a copy of a form of application as filled in by the teacher at the village school of Vigean (Cantal) for the competition of 1896, together with a plan of his garden and demonstration plot:—

Ministry of
Public
Instruction
and
Fine Arts.

Primary
Instruction.

FRENCH REPUBLIC.

SPECIAL PRIZES FOR THEORETICAL AND PRACTICAL INSTRUCTION IN AGRICULTURE IN PUBLIC PRIMARY SCHOOLS.

Competition for 1896. Department of Cantal.

Name of teacher -	-	Etienne Manoux.
Name of commune -	-	Le Vigeau, a village of 1,197 inhabitants.
Age of teacher and length of service.		51 years. 33 years.
Since when has theo- retical and practical instruction in agri- culture been given.		Theoretical instruction since 1866 ; practical since 1878.
Rewards obtained by the teacher for :		
(a.) General instruc- tion.		Honourable mention (1874), bronze medal (1881) silver medal (1885), officer of the Academy (1889), officer of Public Instruction (1895).
(b.) Agricultural in- struction.		One silver gilt medal, four silver medals, one bronze medal, various prizes of books and money.
(c.) The competition organised by the Society for the Pro- tection of Animals.		Two silver gilt medals, two silver medals, one bronze medal, prize of £4.
(d.) Personal services		Thirty-five rewards.
Number of pupils :		
(a.) In the school -		Upper division 6, middle division 13, elementary division 8 ; total 27.
(b.) Rewarded in the competitions.		Nine.
(c.) Rewarded by the Society for the Pro- tection of Animals.		Nine.
(d.) Who have ob- tained the Certifi- cate of Primary Instruction within the last six years.		One in 1890, four in 1895.
(e.) With special men- tion of agriculture.		Four in 1895.
Time devoted each week to :		
(a.) Theoretical in- struction.		Three hours a week.
(b.) Practical instruc- tion.		Five hours a week out of school time.

Summary of the Instruction for each month:—

- I. (a.) Elementary notions of the physical and natural sciences as applied to agriculture.
(b.) Elementary ideas of agriculture and horticulture.

- I. October: (a.) Formation of the earth. (b.) Properties of the soil.
November: (a.) Manure, its composition, use, and management. (b.) Agricultural implements and machines.
December: (a.) The effect of water, frost, snow, hail and ice on agriculture. (b.) The housing and care of animals, particularly farm stock.
January: (a.) Classification of animals. (b.) Care of sheep, goats and pigs.
February: (a.) Solipedes. (b.) Care of horses asses and mules.
March: (a.) Atmospheric pressure; the barometer and its uses. (b.) Work of the spring: the best seeds and how to sow them.
April: (a.) Germination. Beneficial and noxious insects, how to destroy them. (b.) Natural and artificial pastures. Irrigation. Drainage.
May: (a.) Chemical manures and their constituents. Beneficial and harmful birds. (b.) The qualities of different manures and how to apply them.
June: (a.) Effect of temperature on crops. The thermometer and how to use it. (b.) The choice and breeding of animals. Milk. Butter. Cheese.
July: (a.) The structure of plants. How to classify them. Useful and harmful plants. (b.) The harvesting of crops. Ensilage.
August: (a.) Oxygen and hydrogen. (b.) Cleaning the land. Agricultural accounts.

- II. Demonstrations, experiments and practical work performed by the pupils or with their assistance.

They have taken part in all the work and experiments in the demonstration plot and in the school garden. Specimens to illustrate the diagrams prepared by the master have been collected. In school they have assisted at simple experiments with gas, acids, lime, chalk, etc. The anatomy of the heart, stomach, and digestive organs have been practically illustrated. Instruction has been given in pruning, grafting, budding, and layering.

- III. Walks and excursions.

The following visits have been made. October, to a dairy; November, to a farm; December, to an estate for a lesson on drainage; January, to a silo; February, to a chalk pit; March, study of the different properties in the commune, with plans and charts; April, (1) to see the effect of chemical manures on certain crops; (2) to watch potato planting; May, (1) to a neighbouring property to catch insects; (2) to destroy May-bugs with the "Muscardino rose," from the Pasteur Institute; June, (1) to hunt for the holes of small field animals and test the effect of Dr. Danys' "virus"; (2) to see some buckwheat sown; July, (1) mowing and hay making; (2) harvest work.

IV. What part has the master taken in the formation and working of societies for the protection of animals.

The school has been affiliated to the Paris Society for the protection of animals since February 3rd, 1878. At different schools the master has founded three societies for the protection of birds and the destruction of insects. Such a society was formed in connection with this school in March, 1879.

Character of the agricultural instruction given to adults.

In 1894 three lectures were given on the choice of animals, improved seeds, and the most productive plants. In 1895 there were nine lectures on science in its application to agriculture, and three on methods of cultivation; these lectures were illustrated with a magic lantern. In 1896 there have been three lectures on science and nine on agriculture. In addition, an evening class has been held from the beginning of November till the end of March; agricultural subjects were selected for the instruction in reading, dictation, mathematics, and so on.

Results - - -

A large number of cultivators have asked for improved seeds, which have been procured by the master or through the departmental professor of agriculture. Manure is more carefully kept. Liquid manure has not been wasted. A more general and extended use of chemical manures. Trials have been made of more productive plants. One silo has been constructed and others are being made. Ashes and potassic manures have been used for potatoes. Steps have been taken to prevent the escape of fertilising gases from farmyard manure by covering it. The younger people take more interest in agricultural pursuits. Modern ways in butter and cheese-making and in dairy management have been adopted. Something has been done towards draining the marshes. Liming, which was previously unknown or not practised in the commune, has been introduced. Marling has also been attempted in some instances.

In 1892 the *Société des Agriculteurs de France* passed a resolution pointing out the advantage of such competitions as a stimulus to agricultural instruction, and since then they have been organised by agricultural societies of every degree throughout the country. Prominent among these is the *Comité Central Agricole de la Sologne*. This society neglects nothing which can either directly or indirectly promote agricultural interests. Its secretary, M. Denizet, most courteously supplied me with a large number of reports, from which the variety and extent of the work undertaken is apparent. In his own words, "*vous y verrez que depuis le voyage que faisait en France en 1787 et 1788, votre compatriote le voyageur, Arthur Young, la Sologne dont il a parlé avec une compassion trop justifiée, a subi la transformation la plus extraordinaire et est devenue une contrée suffisamment fertile et très recherchée pour sa chasse qui y*

est très belle." As examples of the kind of competitions usually arranged the following may be taken. The *Comice Agricole de l'Arrondissement d'Orléans*, aided by grants of £40 from the Government, and of £28 from the Department, in addition to large prizes to agriculturists, farm servants, and workmen, offers medals and books as prizes to all teachers, male and female students at the training colleges, and to pupils in primary schools for agricultural instruction. The examination for the latter is partly written and partly oral. The character of the examinations may be gathered from the subjoined specimen of a paper written by a boy of 11 for a similar competition at Montargis (Loiret) in 1898.

Concours Cantonal : Montargis.

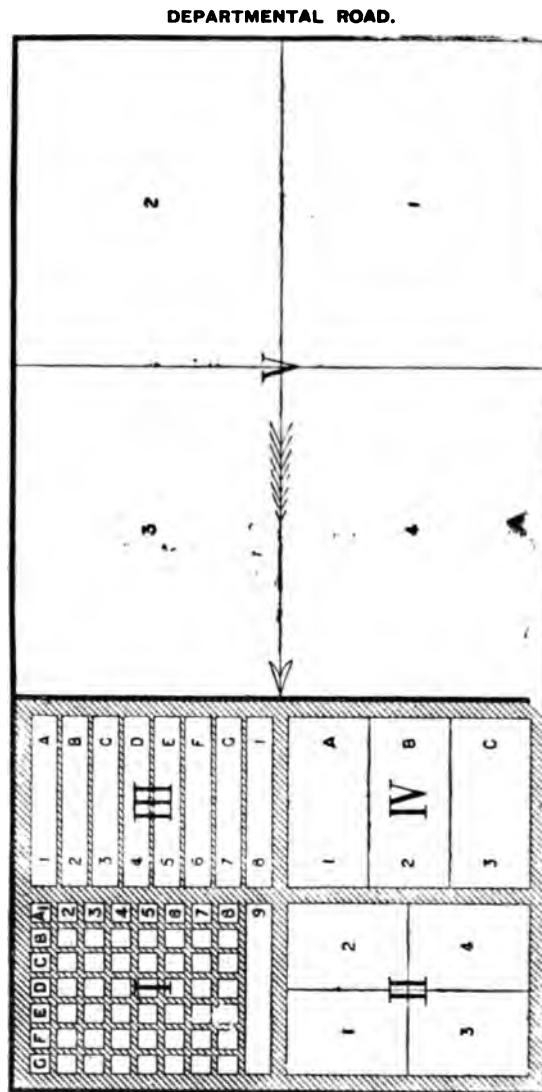
Devoir d'agriculture.—Des prairies. Définition et division. Leur utilité. Plantes qui les composent. Création d'une prairie. Soins à lui donner. Engrais qui leur conviennent. Fenaïson et récolte. L'ensilage. Des prairies artificielles. Comment on les crée. Plantes qui les composent et sol qui convienne à chacune d'elles. Soins à donner à ces prairies. Leurs récoltes.

Développement.—Une prairie est un terrain sur lequel on a semé les plantes herbacées fourragères. Il y a deux sortes de prairies ; les prairies artificielles et les prairies naturelles. Les prairies ont une grande importance dans la ferme, c'est pourquoi le cultivateur ne doit pas négliger d'en créer de nouvelles s'il n'en a pas assez, car avec du fourrage on a du bétail, avec du bétail du fumier et avec du fumier on a de bonnes et abondantes (*sic*) récoltes ; il y a un proverbe qui dit : "Qui a foin a pain." Les plantes qui composent les prairies artificielles sont : la luzerne que l'on sème au printemps dans un sol profond et de bonne qualité, le sainfoin, ainsi appelé à cause qu'il est très bon et qui signifie foin sain, réussit bien dans les sols calcaires et sableux. Le trèfle se sème dans les terres fraîches et profondes, on cultive trois espèces de trèfles : le trèfle incarnat à fleurs rouges, le trèfle violet qu'on sème dans une céréale de printemps, le trèfle blanc qui se plaît à peu près dans tous les terrains se sème aussi au printemps. La minette se sème en mars, on la fait ordinairement pâturer, elle réussit bien dans les sols calcaires. On cultive aussi pour être consommés en vert ; les grands choux, les grands maïs et souvent l'orge et le seigle. Les prairies naturelles sont formées de plantes de la famille des graminées, tels sont ; le fromental élevé, le pâturin des prés, le dactyle pelotonné, le ray-grass, la fétuque, la fleuve odorante, les trois trèfles. Pour créer une prairie naturelle, on choisit un terrain dans une vallée le plus près possible d'une rivière, car cette sorte de prairie aime l'humidité, on fume avec de bon fumier trois ou quatre fois la dose ordinaire. Ensuite on sème les divers (*sic*) graines. Les prairies artificielles sont sujettes à une maladie ; la cuscute que l'on combat en répandant de la cendre, de la suie. Les prairies naturelles pour donner une récolte de bonne qualité exigent

PLAN OF THE GARDEN AND DEMONSTRATION PLOT.

AT THE BOYS' SCHOOL, VIGEAN (CANTAL).

Scale—Half a Centimetre to a Metre.



DESCRIPTION.

I.	
1. Without manure.	
2. Complete manure.	
3. Strong manure.	A. Forage crop.
4. Complete manure without nitrate.	B. Barley.
5. The same without potash.	C. Oats (Joannette).
6. The same without phosphoric acid.	D. Black Californian Oats.
7. The same without lime.	E. Roots.
8. Farmyard manure.	F. Potatoes.
9. Farmyard manure.	G. Prickly Comfrey.
II.	
CROP : LUZERNE.	
1. Farmyard manure.	
2. Manure and lime.	
3. Manure and chalky marl.	
4. Chloride of potash.	
III.	
1. Without manure.	A. Peas and beans.
2. Cinders and potassic manure.	B. Onions.
3. Farmyard manure.	C. Short carrots from the Ardenne
4. Manure.	D. Mulhouse onions.
5. Horse manure.	E. Large spinach from Viroflay.
6. Horse manure.	F. Long thick carrots.
7. Fowl dung.	G. Early flat turnips.
8. Horse manure.	I. Long turnips.
IV.	
1. Basic slag.	A. Cabbage.
2. Farmyard manure.	B. Beans.
3. Manure and lime.	C. Kohl Rabi.
V.	
CROP : IMPROVED OATS.	
1. Without manure.	
2. Superphosphate.	
3. Basic slag.	
4. Farmyard manure.	

qu'on y répande du terreau ou du fumier décomposé, du purin étendu, un litre de purin pour trois ou quatre litre (*sic*) d'eau, pour détruire les mouese (*sic*), les joncs, les roseaux on met de la cendre de la suie. Par fenaison, j'entende l'époque où l'on fait la récolte du foin et du fourrage et les travaux qu'ils exigent pour les récolter. Quand le foin est fauché, on les retoure (*sic*) avec une fourche en bois ou en fer afin qu'il sèche, quand il est sec on le pousse de chaque côté de manière à former un ou plusieurs gros tas de la longueur du champ, puis en (*sic*) le met en melons (*sic*), petites meules qui contiennent environ de dix à onze bottes, et on le charge dans des voitures pour le rentrer ou pour le mettre en meules si on n'a pas assez de place pour le mettre. Quelquefois on met le fourrage en moyettes ou petites bottes liées à une extrémité ce qui fait un cône, s'il pleut, l'eau glissera sur ce cône sans en mouiller l'intérieur. Dans certains pays, quand il y a de grandes pluies au moment de la fenaison, on rentre le foin ou le fourrage tout vert, on en met tous les jours une couche d'environ quatre vingt centimètres que l'on foule bien. Quand il n'y a plus rien à mettre, on recouvre le tout d'une couche de terres de vingt à vingt cinq centimètres, le tout fermente bien et on le donne l'hiver au (*sic*) bestiaux, ce mode se nomme ensilage.

This paper, which was written by Paul Castallot, aged eleven, of the boys' school at Dammarie-sur-Loing, was marked "assez bon" by the examiner. To enable a school to compete, at least one-tenth of the pupils upon the register must be entered for the examination.

Throughout Loiret competitions for school gardens have been arranged by the *Société d'Horticulture d'Orléans et du Loiret*. The conditions of the competition are that the school garden shall be a special piece of ground, divided into as many plots as there are children from 10 to 13 years of age at the school; the plots are to be cultivated by the pupils under the direction of the teacher; seeds are supplied free to all masters and mistresses who enter their schools for competition; the practical work is to be done out of school hours; either flowers or vegetables may be grown; all the produce is the property of the pupils. One of the most useful competitions was organised by the *Société d'Agriculture de Cher*, of which the Marquis de Vogué is President, in 1895. Various medals and valuable money prizes were given to those teachers who sent in the best detailed account of the agricultural, social, and economic conditions of their respective communes. The Marquis informed me that similar competitions are now held in many parts of the country; and, as he said, besides inducing the teachers to acquire information of the highest service to them as teachers, and in their relations with the parents, they furnish the Government and the agricultural societies with invaluable statistics. In this way he hopes eventually to cover the whole country. The *Syndicats Agricoles*, which somewhat resemble the Irish Agricultural Organisation Society, and of which a very interesting account

has recently been published,¹ hold annual examinations and give certificates in agriculture and horticulture to boys and girls at the primary schools. This work, which was specially recommended by the *Société des Agriculteurs de France* in 1893, was first started in Brittany by the *Syndicat Agricole et Horticole* of Ille-et-Vilaine with the assistance of the Christian Brothers at Ploermel. It has now spread all over France. Excellent schemes of general instruction, the object of which is "*faire servir la lecture, l'écriture, l'orthographe, l'arithmétique, voire même la rédaction, pour instruire et former le futur agriculteur et développer chez lui des idées en rapport avec la profession de ses parents*,"² have been issued from Rennes, the headquarters of the Superior Council of Agricultural Education in Brittany. Last year the *Union des Syndicats Agricoles du Sud-Est* examined 1,636 boys and 219 girls, from 218 free denominational schools and 29 State schools. As a rule the teachers of the State schools are forbidden to allow their children to enter for the examination. This is partly due to a belief that the *Syndicats Agricoles* are political in their objects. There does not appear to be the slightest foundation for this, the work of the syndicates being almost identical with that of the Irish Society, and M. Bourgne, Departmental Professor of Agriculture for Eure, told me that in his opinion the *Syndicats Agricoles* during the past 15 years had done more than any other body of men for the improvement of agricultural education. At the same time it must be admitted that, since agriculture has been made a compulsory subject for rural schools in the examination for the *certificat d'études primaires*, the necessity for another examination and certificate is not so apparent. Any detailed account of the ever-increasing amount of agricultural instruction given in the various denominational schools throughout France, all of which is voluntary and due to private initiative, would be beyond the scope of the present report. It deserves to be carefully studied, and I much regret that I cannot here avail myself of the extensive information upon the subject courteously placed at my disposal by the Frère Paulin, director of the magnificent Agricultural Institution at Beauvais.

Enough has been said to show that the Government and the leading agriculturists of France are fully alive to the importance of agricultural instruction in the rural schools, and realise how valuable it may be made. Progress, however, must be slow. Time and experience are required to determine the best methods of instructing little children. Farmers and labourers, fettered to routine, have still in many parts to be convinced that the village schoolmaster can help in the cultivation of the soil, and science is mistrusted. Parents, too, despise the teaching which does not specially prepare their children to become "*fonctionnaires*" of some kind, and to enter into "*la politique alimentaire*," as it has been aptly termed. M. Franc, Departmental Professor of Agriculture for Cher, with whom I had a long interview at Bourges, goes so far as to say that this prejudice will never be destroyed, and that agricultural education will never be esteemed as it

¹ Les Syndicats Agricoles et Horticoles et leur œuvre, Comte de Rocquigny, 1900. Ar Colin et

² Rapport de Frère Paulin à l'Association Bretonne, edit. ii.

ought to be in a country like France, whose prosperity depends so largely upon agriculture, until such education is compulsory in every school of every grade. Few things are more important than to eradicate the foolish idea that manual labour is socially inferior to clerical occupations. The habit, too, of depending upon the State, and of looking to it for guidance and direction in all the *minutiae* of public life—the result of the centralised system of government so well described by Mr. Bodley in his volumes upon France—paralyses local initiative and local enterprise. The communal authorities do not feel that the duty of enabling their schools to meet the needs of rural life is a responsibility that rests on them.

Whether improved agricultural education will effectually check the tendency to desert the rural for the urban districts may be open to question. The migration is mainly due to social and economic causes, or perhaps, as M. Lévasseur has put it, "*la force d'attraction des groupes humains est correspondante à leur masse.*" During the last 100 years the rural population in France has sunk from 78·24 per cent. of the whole in 1789 to 60 per cent. in 1896. In an interesting article upon the subject, which has just appeared in the *Revue des Deux Mondes*, M. R. Waurin gives a very true summary of the reasons why life in the towns is preferred. "*Il y en a deux sortes: les unes de tous les temps, les autres propres à notre époque.*"

D'abord, la ville fascine le campagnard; on y prend le tramway, la voiture du peuple. Puis, quelles splendeurs dans les cités modernes! Qu'est, après cela, la ferme modeste, noircie par l'âge, ornée seulement d'une fosse à purin?

Ensuite, dans les villes, 'Voilà,' dit le paysan, 'on s'amuse.'

'Le travail de ville, ajoute-t-il, est bien moins dur que celui des champs.'

L'agriculteur mûré réfléchit que, quand on a l'œil ouvert, on doit, dans des centres semblables, pouvoir tirer son épingle du jeu.

Mais ce qui le séduit le plus, c'est la certitude du salaire régulier. Il a assez d'être frustré du fruit de son travail par la grêle, la mauvaise saison, les maladies du bétail.

Enfin, il perdra là-bas la gaucherie native qui le gêne: il y grandira socialement.

Il y aura de bonnes écoles pour ses enfants qui pourront, un jour, faire honneur à leur père.

Quelques-uns, cependant, apeurés devant le bruit de la cité, préfèrent rester attachés au terroir: ceux-là sont l'exception, les sages, que les jeunes gens ne manquent pas de blâmer.'

The compulsory military service also, which takes a man away from country life for three years, disinclines him afterwards to go back to its dull monotony. To remedy this it has been suggested that, following the practice in Algeria and the colonies, one year's military service should be remitted to those who have served for two years with credit, and who will undertake to return to their villages and follow agricultural pursuits for a definite period. But, after all, the discussion of the probable effect of education upon the depopulation of the rural districts

is somewhat academic. Of one thing, however, we may be sure. If the instruction in the village school is such as to direct the mind of the child towards the life about him rather than to that of the town, and to put him in the way of qualifying himself in after life to make the cultivation of the soil a source of profit, he will not be more inclined to seek his fortune elsewhere. Already in those districts in which agricultural instruction has been successfully given for some years, there is a marked revival of interest in all that relates to agriculture, and a greater disposition to look to it as a calling. The Marquis de St. Paul told me of two young men in his own village of Chécy (Loiret) who had remained at home and become excellent farmers, solely because their ambition had been stirred through what they were taught in the village school and the continuation classes. One swallow does not make a summer, but there is no reason why such instances should not be indefinitely multiplied.

CONTINUATION CLASSES.

If the instruction in the elementary school is to be of permanent value opportunities for its extension are imperative, and nothing in the recent history of French education is more striking than the growth in the number of the *cours d'adultes*. In Loiret, for instance, out of 343 communes, 305 have one or more continuation classes. The latest statistics are as follows:—

	Number of Classes.	Number of Pupils.	
		Male.	Female.
Seine-Inférieure - - - -	457	7,085	1,437
Eure-et-Loir - - - -	321	3,836	331
Loiret - - - -	364	6,578	610
Cher - - - -	231	3,705	1,050

The average attendance at each class in Cher is about twenty, and in Loiret about sixteen. I have not been able to procure the figures for Seine-Inférieure and Eure-et-Loir, nor do I know the exact number of classes in Eure. M. Pérot, however, the Inspecteur d'Académie for that department, who also gave me a circular letter authorising and requesting all primary teachers throughout the department to give their pupils a holiday, if by so doing they could place themselves more entirely at my disposal, procured me specially prepared reports from the primary inspectors of each of the districts into which the department is divided, upon the condition of education generally within

their respective areas. From these it appears that the increase in their evening schools is equally marked, and that they are very well attended.

The classes, which are only open to students above thirteen years of age, and to which students of both sexes are not admitted, are established by the Prefect, after consultation with the Inspector of the Academy, on the application of the Municipal Council. They are subject to the same inspection as all primary schools. They are usually taught by the elementary teachers, but any person, nominated by the Mayor, if approved by the Prefect and the Inspector of the Academy, may conduct the class. A syllabus of the instruction to be given must be submitted to the Inspector when the request for a class is made. The usual subjects are, for males, arithmetic, writing, land surveying, cubic measurements, practical agriculture, forms of lease and other agreements, discussions on matters of general interest; and, for females, French, arithmetic, and domestic economy. In every case the instruction is as practical as possible. The classes are held in the winter, and generally last from three to three and a-half months, with six hours' instruction a week. In many parts of Cher, where the population is extremely scattered, attendance in bad weather is often a matter of considerable difficulty. On condition that the communes pay the cost of lighting and heating the rooms, the State makes a grant towards the payment of the teachers, and these grants are increasing. The salaries are also made up of contributions from the communes, the County Boards or Councils, in a few exceptional cases from the students, and by bequests. The following were the sums contributed towards the expenses of the classes held in Loiret 1898 to 1899:—Lighting and heating 6,381.60 frs. Contributions from the communes towards the payment of teachers 27,463 frs., from students 219 frs., from the department 1,500 frs., from the State 920 frs., bequests 280 frs. Total 36,763.60 frs. Of this sum 30,372 francs were available for salaries, and as there are 364 classes, each teacher would get on the average about 83½ francs, or £3 9s. 7d. This is poor pay, and in several departments the communes contribute a good deal less. Frequently the teachers receive no salary at all, and M. Pérot has urged that the communes, or at any rate the more important of them, should be compelled to raise adequate funds. Teachers are under no obligation to take *cours d'adultes*, but at present they are very enthusiastic about the work, and presumably trust that, as its success increases, their claims will be more fully recognised. The amount of salary is arranged between the communes and the teachers. Since January, 1899, certain honorary distinctions have been conferred by the Ministry of Public Instruction upon those masters and mistresses who have displayed most zeal and achieved most success in continuation classes.

Public lectures (*conférences populaires*) provide a somewhat more advanced form of instruction, and invariably attract large audiences. Last year no less than 2,131 such meetings were

held in Loiret, and 1,491 in Eure-et-Loir. The subjects generally treated are geography, history, and science. Most of the departments are well supplied with magic lanterns, photographic views, and other apparatus. This is also work to which many of the teachers devote themselves with so much energy that the Inspectors are beginning to fear that the ordinary duties of the day school may be neglected. One of them in his last Report remarks:—"*Il y a certainement des maîtres qui peuvent mener toutes choses de front: école, mairie, cours d'adultes; mais, n'est-il pas permis de s'inquiéter et de se demander si pour beaucoup d'autres l'accessoire ne devient pas le principal. Nous connaissons des instituteurs qui sont réputés comme conférenciers, et qui ont, hélas! une bien mauvaise classe.*"

THE TRAINING OF TEACHERS.

The establishment and maintenance of both a Male and a Female Training College became incumbent upon every department within four years after August, 1879. In certain circumstances two departments might combine for the purpose of establishing a single college. Towards the initial expenses the State issued loans, repayable within 31 years, and pays the salaries of all members of the college staffs. Attached to every college is a practice primary school, and female training colleges should have an infant school (*école maternelle*) as well. The Ministry of Public Instruction, upon the advice of the Rector and the Departmental Council, determines every year how many students are to be admitted. These are selected according to their order of merit after examination. All board and tuition are free. Every candidate for admission must (1) be not less than 16 years of age, and not more than 18, on the first of October in the year when he presents himself; (2) must have obtained the *brevet élémentaire*; (3) must undertake to serve for ten years as a teacher; and (4) must be free from any disease that would incapacitate him from teaching. The regulation as to age may be remitted occasionally. If any student leave the college or is expelled, or if a teacher break his engagement to serve for ten years, he is bound to refund all the expenses incurred on his behalf for food, washing, and books. He may, however, be relieved from this. The course lasts three years, and students are promoted from the first to the second, or from the second to the third year, according to their success in the examination held at the end of each year. At the end of the course every student must present himself to be examined for the *brevet supérieur*. On passing this the students become entitled in the order of their seniority and according to their degrees to the first vacancies in the department. When first appointed to a school the teacher receives a present of books, which he selects for himself. The character of the instruction may be gathered from the subjoined copy of the time-table in use at the training college at Chartres:—

Before attempting to make agricultural instruction obligatory in the primary schools, the Government realised that steps must be taken to qualify the teachers. The law of June 16, 1879, was therefore passed, which enacts that within six years of its date every department not already possessing a professor of agriculture shall elect one by competitive examination, and that the professors, besides their other duties, are to give instruction in agriculture to all students in the training colleges, to which their residences must be as near as possible. Article 10 of the same Act provides that within three years after the complete organisation of agricultural instruction at the training colleges, such instruction shall be obligatory in all primary schools. Long before 1879 agricultural instruction had been a common feature at some of the colleges. Special attention had been paid to the subject at Orleans since the foundation of its Training College in 1829. Now the instruction is given to all students alike in all training colleges. There has never been any thought of differentiating between the training of the urban and that of the rural teacher. Quite apart from its professional value to the teacher, instruction of the kind provided is useful to everybody, and any distinction between the qualifications of the urban and those of the rural teacher is open to many objections. It need hardly be said, therefore, that the idea of a special college for the training of rural teachers has never been suggested. Instruction in the physical and natural sciences is given by the Professor of Science. As might have been expected, some difficulty was experienced in co-ordinating his lessons with those of the Professor of Agriculture. To remedy this want of harmony a circular was issued on April 25, 1898, emphasising the necessity of co-ordination and amending the previous regulations under which the subjects were taught. Second and third year students, who alone come under the Professor of Agriculture, may no longer be taught in the same class. Each year is to have its separate course of twenty-one lessons of an hour and a half during the winter. The Professor of Agriculture is also responsible for the practical work done in the College gardens. His work is subject to inspection by the Inspectors General of Agriculture, and every scheme of instruction must be submitted for approval to a joint committee of members of the Ministries of Agriculture and Public Instruction.

The following is the revised syllabus at Orleans:—Second year: (i.) Agriculture. *Agrologie*. Étude du sol et du sous-sol. Modifications des propriétés physiques des sols. Amendements. Engrais. *Hydrologie*: Irrigation, drainage. *Préparation du Sol*: Labours, hersages, roulages, quasi-labours. Céréales: Froment, épeautre, seigle, méteil. Orge, avoine, maïs, sorgho, millet, sarrazin. Ensemencements. Entretien. Récoltes à la main et avec les moissonneuses. Transport des récoltes. Conservation. Battage. Tarage. Criblage. Triage. Conservation des grains (greniers, silos). Plantes légumineuses alimentaires. Plantes fourragères artificielles. Prairies naturelles et temporaires. Racines fourragères et comestibles. Plantes industrielles: Oléagineuses, tinctoriales, textiles, saccharifères,

économiques. Viticulture. Pommier, poirier et cormier à cidre. Sylviculture. Notions sur les forêts. Assolements. Maladies des végétaux cultivés. (ii.) Horticulture. Notions générales de culture. Cultures arborescentes: Vigne, pêcher, prunier cerisier, abricotier, amandier, coignassier, groseillier, néflier noisetier, plantes d'ornement. Jardin potager. Installation Principales cultures potagères.

Third year. *Zootecnie, économie rurale, législation rurale, statistique.* Revision et complément du cours de l'année précédente. Alimentation rationnelle des bestiaux. Production du lait. Production de la viande, de la force, du fumier. Habitat. Lois de l'hérédité. *Equidés*: Cheval, âne, mulet. *Bovidés*: Bœuf, zébus, et buffle. *Ovidés*: ariétins et caprins. *Suidés*: porcins, chien, lapin, volailles. Maladies contagieuses des bestiaux. Pisciculture. Apiculture. Animaux nuisibles à l'agriculture. Hygiène des animaux. *Notions d'économie rurale Institutions auxiliaires de l'agriculture. Législation rurale (Lois principales). Statistique de la France et du Loiret.* Résumé du cours.

This practically covers every aspect of rural life, and it is not easy to understand how the students can digest it all in 40 lessons of an hour and a half each spread over two winters.

The applications of the instruction for third year students in 1899-1900 were as follows:—

1. Visit to the Departmental vine nursery at Olivet.
2. Visit to a tree nursery.
3. Lesson in the use of gardening tools.
4. Lesson on clearing trees of dead wood, &c.
5. Analysis of a piece of chalk in the laboratory.
6. Physico-chemical analysis of a soil.
7. Microscopic study of food.
8. Microscopic study of the diseases of plants.
9. Pruning.
10. Grafting, layering, cuttings.
- 11, 12 and 13. Vine grafting.
14. Visit to an agricultural factory.
15. Visit to an agricultural builder.
16. Visit to a farm.
17. Examination conducted by the *Comice Agricole*.

In addition to this second year students have three lessons in grafting vines. This scheme is eminently practical and well planned.

The work in the garden is thus arranged:—

First year students assist the gardener in his various duties.

Second year students perform some agricultural experiments and cultivate some plants in pots under the direction of the Professor of Chemistry, and have some lessons in kitchen gardening and the cultivation of fruit trees from the gardener.

Third year students each have a small portion of ground to cultivate.

I visited the training colleges at Bourges, Orleans, Chartres and Evreux. As it happened to be the vacation when I was at

Bourges, any criticism of the garden would be unfair. It is very small, and the general appearance of the college was not pleasing. Repairs are sadly needed, a matter to which M. Pouillot has frequently drawn the attention of the departmental authority.

At Orleans the students were just coming out for their morning recreation when I entered the garden. The eagerness with which the elder ones went off to water their plots and to compare notes upon their crops sufficiently testified to the popularity of the instruction and to the healthy rivalry which it promotes. These plots are about $7\frac{1}{2}$ yards long by $2\frac{1}{2}$ yards wide, and each had rows of potatoes, strawberries, scorzonera, and flowers. This affords a fair example of varied cultivation upon a small scale, and experiments are made with chemical manures. The whole garden, which is thoroughly well kept by M. Soleil, the gardener, comprises rather more than an acre and a half. Part of it is reserved as a nursery for fruit trees, some of which are distributed every year to the village schools throughout the department. Each student in his first year makes a graft, which he cultivates until the end of his course, and then removes to his new school garden. In addition to the applications of the theoretical instruction mentioned above M. Duplessis, the Professor of Agriculture, takes the students for botanical walks almost every Thursday, and there is a well-arranged "*jardin botanique*" at the college.

Chartres is provided with a garden of nearly five acres in extent. This affords ample opportunity for instruction in every form of horticulture, but the amount of land is more than can be properly managed by a single gardener. Portions of the garden are admirably cultivated, and all that is possible under existing circumstances is done. This year some interesting and valuable experiments in potato growing with various manures are being made. Each third year a student has a plot of his own, about 22 yards by a yard and a half. The general course of instruction is similar to that at Orleans, and, as will have been seen from M. Nalot's letter, M. Garola, the Professor of Agriculture, makes it of great practical value. M. Dauzat, the Inspector of the Academy, also spoke to me in the highest terms of the training which the students received for their rural duties.

At Evreux I was fortunate enough to find M. Bourgne engaged with the students. Some were planting potatoes, others sowing seeds under his direction: all appeared to enjoy it and the lesson was full of sound advice. M. Bourgne told me of the great assistance which he had received in his capacity as Professor of Agriculture from at least fifteen teachers in the country districts. One of the duties of the Professors is to encourage and assist the farmers to form experimental plots. In this work the teachers had helped him very materially by surveying and marking out the land, weighing and mixing the manures for the different plots, and calculating their respective crops. As at Nogent-le-Rotrou they take their pupils to see what is being done. M. Bourgne is convinced that the rural teacher may

thus play a considerable part in the diffusion of scientific knowledge and the consequent improvement of the agriculture of the country. I also visited the French Training College at Evreux, where the Directress is an enthusiastic horticulturist. The students go for botanical walks, and have flowers of their own in the college garden to cultivate. On the whole the instruction seems to me sufficient to satisfy the requirements of an elementary teacher. It will not make him an agricultural expert, but such a man would be out of place in a village school, and would do more harm than good. Children have to learn much besides the principles of agriculture and horticulture, and to train a teacher as though the latter were the most important of his professional duties would be fatal. The sense of proportion often suffers from enthusiasm for reform. In principle the system of training now pursued is sound: in practice it must vary in its results according to the skill of the different professors and the resources of each particular college. It is inevitable that the theoretical instruction should be more than the practical, having regard to the demands made upon the time of the students by their other lessons, but, if the science be applied as it is at Orleans and Chartres, the student will have laid a foundation of practical knowledge upon which in the future he may build on his own account. The agriculturist pure and simple may not be satisfied, but the claims of general education cannot be ignored. On the other hand, no training can be satisfactory which omits to prepare the students in any way for the conditions of rural life, and which is limited solely to the requirements of the town. The reasonable course to follow is well put by M. René Le Blanc: "*Le professeur d'agriculture et celui de sciences physiques et naturelles doivent se concerter pour assurer la communauté de leurs vues et de leurs efforts; ils se souviendront que l'école normale n'est pas un institut agronomique, qu'elle ne peut prétendre par conséquent à former des praticiens, mais qu'on ne saurait trop y orienter les leçons et les exercices de sciences vers les choses d'agriculture.*"

¹ L'Enseignement Agricole, ed. iii. p. 64.

² C. 8447 287.

HIGHER PRIMARY SCHOOLS.

A full account of these schools may be read in a paper² by Mr. R. L. Morant, which deserves to be carefully studied not only for the details of their organisation, but for the valuable remarks and quotations upon the character of the agricultural instruction that may be given in them. Few of them, however, have an agricultural side, and they are rarely to be found in the country districts. Complaint has frequently been made of the small assistance given by the State towards their establishment. Outside the towns the opportunities for education beyond the elementary school are lamentably few, and these schools with their commercial, industrial, and agricultural sections suggest just the type of institution which should be within reach of every child. At the *école primaire supérieure* at Bourges, where I was much pleased with the tone and behaviour of the boys, though less so with the condition of the buildings, the following is the time-table:—

HIGHER PRIMARY SCHOOL AT ROUGEES.

Time-table, 1889-1900.

—	Classes.	8-9 a.m.	9-10 a.m.	10-10.15	10.15-11.15 a.m.	11.15-1.	1-2 p.m.	2-3 p.m.	3-3.15.	3.15-4.15 p.m.
Monday.	3 { a b	History.	Mathematics. French Language. Geography.	RECREATION.	Preparation.	DINNER AND RECREATION.	Manual Instruction. Drawing.	Manual Instruction. Drawing.	RECREATION.	Mathematics. French Language. Manual Instruction. French Language. Drawing.
	2 { a b	French Language. Manual Instruction.	Geography.		Manual Instruction. Drawing.					
	1 { a b	Chemistry. Algebra.	Mathematics. Morals.							
Tuesday.	3 { a b		Drawing.	RECREATION.	Chemistry.	DINNER AND RECREATION.	English. Mathematics. French Language. Drawing.	Civil Rights. Mathematics. Manual Instruction. Mathematics. Drawing.	RECREATION.	Gymnastics. French Language. Manual Instruction.
	2 { a b	Book-keeping. Physics. English.	Physics. Mathematics. Agriculture.		Manual Instruction. Writing. French Language. Drawing.					
	1 { a b	Mathematics.	French Language.							
Wednesday.	3 { a b		Manual Instruction. Drawing.	RECREATION.	History.	DINNER AND RECREATION.	French Language. Mathematics. English.	French Language. Natural History. Drawing. Gymnastics.	RECREATION.	Book-keeping. Agriculture. French Language. Physics. Drawing.
	2 { a b	French Language. Morals. Geography.	Mathematics. Geography. Physics.		Mathematics. Manual Instruction. Drawing. Mathematics.					
	1 { a b									
Friday.	3 { a b	Physics.	Geography.	RECREATION.	English. Mathematics. Chemistry.	DINNER AND RECREATION.	Drawing. French Language. Mathematics.	Drawing. French Language. Mathematics. Natural History.	RECREATION.	French Language. Mathematics. Singing. Drawing. Writing.
	2 { a b	Mathematics. Manual Instruction. English.	English. Chemistry. French Language. Manual Instruction.		Drawing. Natural History. French Language.					
	1 { a b	French Language.	Manual Instruction.							
Saturday.	3 { a b		Writing.	RECREATION.	Morals.	DINNER AND RECREATION.	Mathematics. Drawing. English.	Natural History. Manual Instruction. Book-keeping. History. Mathematics.	RECREATION.	Singing. Manual Instruction. History. French Language. Mathematics.
	2 { a b	French Language. Writing. Morals.	History. Drawing. Mathematics. Manual Instruction.		Morals. Morals. Drawing. Algebra Manual Instruction.					
	1 { a b	Mathematics.								

Of the 683 boys who have passed through the school from 1899 to 1900, 25 have gone into agriculture, 289 into industry, 128 into commerce, 52 to technical schools, 74 to training colleges, 103 into the public service, and of 12 the destination is unknown. The school career of those who complete the full course of three years should be crowned by the *certificat d'études primaires supérieures*, but very few seek to obtain it. Only 68 have been obtained by the above 683 boys. In many places, notably at Orleans, the Chambers of Commerce are endeavouring to make the certificate more in request by emphasising the importance which they attach to its possession.

Unfortunately I was unable to visit any of the higher primary schools with an agricultural side except at Onzain (Loir-et-Cher), which is described by Mr. Brereton.

FARM SCHOOLS.

As the condition of agriculture and agricultural education has improved, the number of these schools (*fermes écoles*) has steadily decreased. In 1852 there were 75 such establishments, now there are only 14. North of Bourges, which may be taken as the centre of France, they have ceased to exist. They formed a useful part of the provision for elementary agricultural education, but the system under which they were worked laid them open to the objection that their directors (who were either the owners or lessees of the farm) looked upon the pupils as labourers placed at their disposal by the State. There was plenty of rough work upon the land but very little instruction. From conversation with farmers in different parts of the country, I found that they regretted the disappearance of these schools in view of the essentially practical character of what was done in them. There can be no doubt, however, that, from an educational point of view, it has been wise to convert them into or replace them by Practical Agricultural Schools.

PRACTICAL AGRICULTURAL SCHOOLS.

These also come under the category of elementary agricultural education. I visited an excellent school of this type at Chesnoy, about three miles from Montargis (Cher), where I was most hospitably entertained by the Director, M. Jolivet. Any detailed description would be foreign to the purpose of this Report. It must suffice, therefore, to say that the whole estate comprises some 400 acres, and that the high quality of the crops testifies to the value of the instruction, having regard to the poor nature of the chalky soil. In the garden considerable attention is naturally paid to the cultivation of the vine. I was also much struck with the fine appearance of the sheep—a cross between South-down rams and Berichonne ewes.

Nor can any account be given here of the methods pursued at the National School of Horticulture (*Jardin Potager*) at Versailles, or the National Agricultural School at Grignon (Seine-et-Oise), to both of which I had the advantage of long visits.

CONCLUSION.

Although the character and extent of the instruction in the primary schools may not be such as might have been inferred from the official circulars and programmes, still an examination of the French system indicates many points worthy of serious consideration.

In regard to the primary school itself, I did not see any work out of doors of a more practical character than what has now been done for some years at several of our rural schools, especially in the Isle of Wight, where the influence of Mr. T. G. Rooper, H.M.I., has led to several interesting experiments being made in this branch of rural education. Nor did I hear any class lessons superior to those of the Alderney Grammar School, near Tarporley, or to those given during the past summer at the village school at Wye (Surrey) by Mr. A. D. Hall, Principal of the South-Eastern Agricultural College, whose paper upon the subject in the *Journal of Education* is full of valuable hints. These instances afford admirable models for the rest of England. Such instruction, however, should be supplemented by visits to experimental or demonstration plots, and by country walks in which the children should be encouraged to collect plants, insects, and geological specimens. Descriptions of these visits and excursions should invariably be written by the children afterwards. Each school should be furnished with a Museum, similar to the one at Olivet, and with a Library of attractive and reliable books upon every phase of rural life.*

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September.*

A leaving certificate which children could only obtain by regular attendance and after examination in the subjects prescribed for one of the higher standards would tend to raise the whole level of elementary education. It would provide a definite *terminus ad quem*, and would insensibly promote the extension of elementary school life. This matter has been dealt with on several occasions by Sir Joshua Fitch. In France the certificate has partly failed of its object, because the standard of the examination is too low, but, if it were made a real test of a child's knowledge at the age of 12 or 13, it would soon become a passport to good employment. Parents would learn to recognise its value, and be anxious for their children to secure it. Nature study, instruction in which should be practical as well as theoretical (as is now imperative in the case of agriculture and horticulture under the new code for evening continuation schools), might well be made an obligatory subject of examination at rural schools. Mere ability to answer questions out of a text-book is in itself worthless.

The interest of parents in the school would be stimulated if they were to receive a monthly report of a child's progress and

* A useful list of books on natural history pursuits and outdoor interests, suitable for the use of teachers or pupils in country schools, was prepared by Mr. Rooper for an educational conference held at Bilton Grange, near Rugby, in the summer, 1900. It will be found, with a full report of the conference, in the report entitled "How to Improve Rural Education." (Rugby Advertiser Company, Rugby.)

conduct, as generally supplied to parents by teachers in French schools.

As an inducement to teachers to introduce instruction suitable to rural schools, and to qualify themselves to give it, prizes, similar to those in France should be offered by the various Agricultural Societies. The prestige of these prizes would be greatly increased if, as in France, the Board of Agriculture also offered similar distinctions. When a teacher has devoted his whole time to instruction of a particular type, and is suddenly called upon to take an entirely new departure, it is not unreasonable that he should expect some recognition in return for the additional demands that are made upon him. The example set by the Agricultural Societies in France is one which those in England may properly be asked to follow, since the object in view is the provision of instruction which shall be more suited to, and a better preparation for, the industry of agriculture. But such prizes should not be given to the teachers only; as Mr. Jenkins pointed out in his Report, "the true principle of granting rewards for efficiency is to give them directly to the pupils, not only immediately by means of prizes, but also prospectively through the agency of scholarships or bursaries certificates of efficiency, and any means that may be devised to improve the future of the successful pupils."¹ Both teachers and pupils are now rewarded in France. At the same time, it must not be forgotten that it was owing to pressure from the agriculturists themselves that the Government undertook the reform of rural education there. The greater elasticity of the English Code has rendered the task of reform easier here, but progress will depend upon the co-operation of all whose interests lie in the prosperity of the villages.

Facilities must be afforded to all students at the Training Colleges to acquire at least an elementary knowledge of the principles of agriculture and horticulture, and their applications. It ought not to be difficult to organise such instruction upon the lines of that given at Chartres and Orleans, at those colleges which are already provided with gardens, and it might well be given by the lecturers of the County Councils. The fact that most of the students come from the towns and return to the towns is no objection. No one can be the worse for such instruction. Some of those who had received it, having their interests aroused in the pursuits of the country, and feeling themselves qualified to take part in them, might be led to prefer a rural to an urban life. The present system tends wholly in the opposite direction. In the words of Mr. W. Scott Coward's last Report: "To prepare the teachers of a nation with a life so rich in diversity, so varied, so complex . . . we have but one syllabus of a highly academic character. The colleges whose action it influences are moulded by it into an inevitable uniformity, and, as they can turn out annually not nearly as many students as are needed, who are at once absorbed by the large town schools, it follows, by a natural reaction, that their methods are shaped to prepare teachers for the more complex and artificial life of towns."

So long, however, as there is such an inequality between the salaries of the urban and the rural teacher, it is but natural for men to go where they will be better paid. Here again we may possibly learn from France, where teachers are paid not according to their particular schools but according to their qualifications as ascertained by examination. The rural teacher's position is often a more trying and responsible one than that of the town teacher, and he is entitled to equal treatment. The readjustment of salaries (a change which might involve their payment by the State) would do more than anything else to end the difficulty of providing for the rural schools. Contented teachers are essential to the success of any system of education; their legitimate grievances ought to be removed, and they should also have some right of appeal against what they believe to be unjust decisions.

Opportunities for instruction beyond the elementary day school should be within reach of every child: evening continuation schools alone are not sufficient, and the *écoles primaires supérieures*, with their commercial, industrial, and agricultural sides, suggest the type of school required. Some of the small endowed grammar schools in country towns might be remodelled after their pattern with special reference to the agricultural character of the locality. Where there is an entire absence of such schools, a suitably situated elementary school might be developed so as to meet the needs of a considerable area, as is done under the Dick Bequest in Scotland, or, more simply, upper divisions (*cours complémentaires*) might be added to some of the schools.

Finally, the whole agricultural education of the country from its lowest to its highest stages should be under the supervision of Inspectors appointed for the purpose in each county by the Board of Agriculture, until such time as the educational work of the Board of Agriculture is taken over by the Board of Education, if the transfer appear desirable, which is open to doubt.

In addition to those whose names are mentioned in the preceding pages, and from all of whom I received the utmost kindness and assistance, I wish to take this opportunity of expressing my thanks to M. Leygues, Minister of Public Instruction, and to M. Jean Dupuy, Minister of Agriculture, at Paris, for the readiness with which they afforded me every facility to visit the schools and colleges under their respective departments; to H. E. Cardinal Vaughan, the Marquis d'Épinay St. Luc, M. Richard Waddington (Senator for the Seine Inférieure), Mr. Austin Lee, C.B., Sir Joshua Fitch, Sir Ernest Clarke, Major Craigie, Mr. Bodley, and Professor Meldola, F.R.S., for their many introductions, which enabled me to make the inquiry under the most favourable conditions.

I also wish to acknowledge the great help which I had from Mr. Arthur Zachary, Assistant-Master at Hymer's College, Hull, who accompanied me throughout the journey.

JOHN C. MEDD.

August, 1900.

APPENDIX.

The following copy of the particulars furnished by the teacher at La Ferté-Vidame for the Government competition last year in that portion of France, which includes the Department of Eure-et-Loir, has been courteously sent to me by M. Dauzat.

Ministry of
Public
Instruction
and
Fine Arts.

FRENCH REPUBLIC.

SPECIAL PRIZES FOR THEORETICAL AND PRACTICAL INSTRUCTION
IN AGRICULTURE IN PUBLIC PRIMARY SCHOOLS.

Competition for 1899. Department of Eure-et-Loir.

Name of teacher -	John Baptiste Sévin.
Name of commune -	La Ferté-Vidame.
Age and length of service.	53½ years. 35½ years of service.
Date when he commenced theoretical and practical instruction in agriculture.	Theoretical instruction in 1865; practical instruction in 1874.
Rewards obtained for : (1.) General subjects	One first prize, and award of books, two silver medals, six bronze medals, and four honourable mentions.
(2.) Agricultural instruction.	Order of " <i>Chevalier du mérite agricole</i> "; four silver gilt medals, ten silver medals, two bronze medals, and four honourable mentions.
(3.) The competition organised by the Society for the Protection of Animals.	One silver and one bronze medal.
(4.) For personal services.	Letter of congratulation from the prefect of the department, award of a work of art, two silver medals, three bronze medals, and two honourable mentions.
Number of pupils : (1.) In the school -	Upper division 5, middle division 18, elementary division 22; total 45
(2.) Who have gained prizes at the competitions.	Thirty-four.
(3.) Rewarded by the Society for the Protection of Animals.	Two honourable mentions at Paris, and a bronze medal at Havre for the work of twelve pupils.

(4.) Who have obtained the certificat d'études primaires during the past six years.	1893, 1; 1894, 1; 1895, 3; 1896, 2; 1897, 2; 1898, 5. Seven of these obtained special mention for agriculture.
Time devoted each week to :	
(1.) Theoretical instruction in agriculture.	Three hours a week.
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Summary for each month :—	
I. Principal subjects of theoretical instruction, <i>i.e.</i> simple notions on (1) the natural and physical sciences applied to agriculture, and (2) on agriculture and horticulture.	<p>October : The air and its importance for plants. Autumn sowing. The vine. Cider crops.</p> <p>November : The barometer and atmospheric pressure. Preparation of the soil. The nursery garden. Protection in winter. Threshing.</p> <p>December : The composition of the air. Drainage. Liquid and farmyard manure. Winter work in the garden.</p> <p>January : Water, steam, dew, mist, rain, snow. The thermometer. Useful and noxious animals. Rotation of crops. How to store manure. Hedging. Fencing.</p> <p>February : Frost and ice. Vegetables. Agricultural implements. Destruction of caterpillars. Removal of dead wood. Pruning.</p> <p>March : Springs and wells. The soil. Work in the spring. Harrowing. Guano and chemical manures. Cockchafers. Bees.</p> <p>April : The weight of water. Poultry. Vegetables. Fruits. Flowers. Weeds. Grafting. Artificial and natural pastures.</p> <p>May : Heat and electricity. Lightning-conductors. Insects. Birds.</p> <p>June : Common metals and salts. Domestic animals. The farm. The dairy. Hay-making.</p> <p>July and August : The harvest and revision of the previous work.</p>
II. Demonstrations, experiments, and practical work, performed by the pupils or with their assistance.	The pupils assist as much as possible in the work of the school garden, for instance, in pruning, watering, manuring, sowing, planting, weeding and gathering the crops. In addition, simple experiments are made in school every month to illustrate the theoretical lessons.
III. Walks and agricultural excursions.	Advantage is taken of every opportunity to take the children into the country to supplement the instruction in class. These excursions are taken out of school hours, principally in the autumn and spring. They occur at irregular intervals, according to the state of the weather and the conduct of the children. The walks are made the occasion for collecting plants, insects, and geological specimens for the school

III. Walks and agricultural excursions — <i>cont.</i>	museum. The pupils of the first two divisions always accompany the teacher when he has any surveying to do. They also assist the teacher in the cultivation of a second garden, which he has created and planted with various fruit and other trees.
IV. Organisation, &c., of Societies for the protection of animals	The most interesting passages from the monthly Bulletin of the Society for the Protection of Animals at Havre are read in class, exercises are written upon them, and these the children take home, thus diffusing the information throughout the commune. It is very rare to find any of the children guilty of cruelty towards animals, and, although the district is one of woods and forests, birds and their nests are seldom touched. Special prizes are given at the annual prize distribution to those children who have displayed conspicuous zeal in the protection of nests; the fact that these rewards are thus publicly given has an excellent influence.
Agricultural instruction to adults.	Books on agriculture and horticulture are freely lent from the school library. The parents of the children attending the school receive presents of young plants from the teacher's nursery; new varieties of hybrid vines, strawberries, and potatoes. Frequent lectures on agricultural subjects are delivered by the Departmental Professor and the Professor for the Arrondissement. The teacher, who is a member of several agricultural societies, has also read many papers on rural questions in the commune. Several experimental plots have been laid out by him. The net result of the agricultural and horticultural instruction in the school is that very many of the pupils have become intelligent farm labourers and successful gardeners.
Place of the school garden, demonstration or experimental plot.	(Here the teacher gives three plans to scale. These plans indicate the exact nature of each crop, of the school garden, the fruit and vegetable garden, and the experimental plots. These latter have been created on his own initiative, and at his own expense, out of waste and uncultivated lands.)
Remarks of the Primary Inspector.	M. Sévin applies the above programme with judgment, and obtains most satisfactory results. The experiments which he tries in either of his two gardens, or in the plots, of which he has supplied the plans, are followed with interest by the cultivators of the district as well as by the children, and cannot fail to have a good influence on the agricultural progress of the Canton.

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